

THE RAILWAY GAZETTE

A Journal of Management, Engineering and Operation
INCORPORATING

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DIESEL RAILWAY TRACTION SUPPLEMENT

The January issue of THE RAILWAY GAZETTE Supplement, illustrating and describing developments in Diesel Railway Traction, will be ready on January 1, price 1s.

TO CALLERS AND TELEPHONERS

Until further notice our office hours are: Mondays to Fridays 9.30 a.m. till 5.30 p.m.
The office is closed on Saturdays

ANSWERS TO ENQUIRIES

By reason of staff shortage due to enlistment, we regret that it is no longer possible for us to answer enquiries involving research, or to supply dates when articles appeared in back numbers, either by telephone or by letter

ERRORS, PAPER, AND PRINTING

Owing to shortage of staff and altered printing arrangements due to the war, and less time available for proof reading, we ask our readers' indulgence for typographical and other errors they may observe from time to time, also for poorer paper and printing compared with pre-war standards

Achievements and Difficulties of 1945

THE year 1945, now nearing its close, saw the end of the German war seven months ago, and of the war with Japan three months later. The cessation of hostilities in both cases, perhaps, was more rapid than could have been foreseen when the year opened, and possibly this may be adduced for the relative slowness in the industrial reconversion to peacetime activities. On the other hand, there will be a large measure of agreement with the view that the change in Government has not been conducive to smoothness in the transition from peace to war. The present administration seems more concerned with the furtherance of ideological policies than with the overall requirements of a nation which must rehabilitate its trade, if it is to maintain its traditional position as a first class power. Unfortunately, those who, for better or worse, in large part are responsible for the industrial destiny of the nation, seem to be concerned more with order than with speed in our progress in the transitional period. Preparations for a large-scale revival of British export trade are getting under way, but shortages of labour and essential raw materials are still acute. Slowness of release of key personnel and irregularity of distribution both are delaying factors in the tempo of national industrial recovery. There is a feeling that control for its own sake looms too largely, and at the expense of the initiative and enterprise which must be given greater freedom, if maximum results are to be achieved in the country's potentialities for recovery. The announcement of a wide range of nationalisation projects, covering many of our basic industries, including railways, long-distance road haulage, and coal mining does not encourage the taking of long views and progressive expansion. It would perhaps be over-optimistic to hope that this year has seen the worst of the troubles which are so often associated with the end of modern war. Next year may be crucial to the nation. The progress then made in the industrial, commercial, and financial rehabilitation of the country, may decide its future for a generation or more.

Great Britain as a Tourist Centre

The Travel Association of Great Britain & Ireland is seeking subscriptions for its efforts to attract tourists to this country, and is urging the importance of Great Britain's invisible exports as a means of earning foreign currency. There can be no dispute as to the desirability of developing this country's tourist trade, and it is recognised that if this could be done, it would be a valuable means of augmenting our foreign currency resources. In our view, however, the present time is hardly the most propitious for a venture of this sort. The amenities which Great Britain can offer the tourist are so poor that the effect might be the reverse to that intended. For some time it appears likely that hotel accommodation will be insufficient for the ordinary needs of this country and without surplus available for an influx of overseas visitors. The rehabilitation of British hotels, also, is a matter which is urgently required but which will take time, and will be dependent, as is so much else, on the supply of labour and materials. The food and drink situation of this country, also, is not calculated to be attractive to overseas visitors, and present indications are that a little easement in this situation cannot be expected for a considerable time. Indeed, the attraction of overseas tourists on a worth-while scale must be dependent on the development of an enlightened policy towards the hotel industry, and of this there seems little sign as yet.

Uganda Railway Jubilee

Fifty years ago, on December 11, 1895, the first construction party arrived in Mombasa to begin work on a railway through Uganda from the coast to the shores of Lake Victoria. This was the original Uganda Railway, and it is worthy of note that its 585-mile line from Mombasa to Lake Victoria forms only little more than one-third of the Kenya & Uganda Railways & Harbours system of today. Surveys for a railway had been begun by the Imperial British East Africa Company in 1891 but when the report was presented to the Gladstone Government in Great Britain no support for the undertaking was forthcoming, although the need for rail, road, and water communications as a means of suppressing the slave trade in East Africa had been recognised by a conference at Brussels in 1890 which demarcated definite boundaries between British and German zones of influence. A period of political controversy followed, complicated by various changes of Government, and the proposed railway was on one occasion described in some satirical verses as "a lunatic line." In 1895, after a public outcry over the Imperial East Africa Company's decision to withdraw from Uganda on account of lack of support, the British Government took over

the administration of East Africa and formed the Uganda Railway Committee, under the auspices of which construction of the railway was begun. The first train from Mombasa reached the shores of Lake Victoria on December 20, 1901. It was aptly said of the Uganda Railway that "it is not an uncommon thing for a line to open up a country, but this line literally created a country."

Commemorating the Netherlands Railways Strike

On September 17, 1944, the Netherlands Government in London, in consultation with our own and others and the military authorities concerned, broadcast an order to the staff of the Netherlands Railways to cease work everywhere and, by so doing to create the maximum difficulty for the German invader in his endeavours to stem the allied advance. The order was forthwith obeyed and on the next day the whole system was at a standstill. Several months were to pass before the Netherlands saw the last of the invader, and in that period many lives were lost by the operations of war and by reprisals, and many members of the railway staff were deported. A memorial service for those who suffered in the aftermath of the strike has been held in Utrecht Cathedral, followed by a ceremony at which Mr. W. Hupkes, General Manager of the Netherlands Railways read a moving address expressive of the feelings of patriotic Netherlands from the day of invasion in May, 1940, until the expulsion of the enemy. The address was printed in full in the October 25 issue of our contemporary, *Spoor- en Tramwegen*, publication of which was suspended from the day of the strike until October 11, 1945, and to which we express our cordial goodwill on its restoration to its former sphere of usefulness.

An Important Railway Merger in U.S.A.

Details have been made public of an important American railway merger for which the railways concerned are seeking the approval of their stockholders and the authority of the Interstate Commerce Commission. The railways concerned are the Chesapeake & Ohio—one of the most prosperous in the U.S.A.—the New York, Chicago & St. Louis (generally known as the "Nickel Plate"), the Pere Marquette, and the Wheeling & Lake Erie. The fusion of these four would form a powerful group with a system stretching from the Atlantic to the Great Lakes, covering in all 7,200 route miles (including a small mileage in Canada), and the assets, totalling about \$900,000,000, would make the group the third largest in the eastern states, ranking after the Pennsylvania Railroad and the New York Central System. The name of the new corporation would be the Chesapeake & Ohio Railroad. The existing C. & O. already owns a controlling interest in the Nickel Plate, 48 per cent. of the total outstanding stock of the Pere Marquette, and 35 per cent. of that of the Wheeling & Lake Erie. It is proposed that the new corporation should have an authorized capital consisting of \$100,000,000 preferred stock and \$300,000,000 common stock, or \$400,000,000 in all. It is claimed that the unification will make possible economies in operation, maintenance, and administration, and that it will improve passenger and freight service by enabling trains to be worked over shorter and more direct routes than at present between various points on the unified system.

Failures of Material

It is a deeply-ingrained trait of human nature to cover up failures, when such concealment is possible, so that they may not come to the knowledge of others. Our American contemporary, *Railway Engineering & Maintenance*, rightly regards this as unfortunate, for even failures are informative. From the kind and incidence of failures much valuable information can be obtained for the regulation of future procedure, whereas, if the information is suppressed, the knowledge so made available is lost to all except the person or persons immediately involved. Moreover, not all failures can be traced to carelessness or negligence in the manufacture or use of the item concerned; in some cases the need for a modification of design or the use of a different class of material for the work is indicated. Also it is not always possible to determine in advance how new and untried details of equipment will stand up to service conditions, so that failures in such conditions need not be unexpected. The chairman of an American railway committee, when recently seeking information from its members on a subject that was under discussion, remarked that examples of failures in the reports to be submitted would be as welcome as descriptions of successful applications, to show the need for a thorough investigation, resulting in better and more assured progress. It is human nature to seek praise by talking and writing freely of success that has been achieved,

but that success might be further accelerated if failures were discussed and brought to light with equal freedom.

A United States Government Railway Seizure

In March, 1942, as the result of a strike on the Toledo, Peoria & Western Railroad, which, though of no great size, is an important bypass route to the south of Chicago, the Federal Government of the United States took over the line, by direction of the late President Roosevelt, and replaced its president by a Federal administrator. The President of the railway, Mr. G. P. McNear, fought the decision at every stage, and brought a subsequent action, but without success, to compel the administrator to desist from incurring expenditure on the line which the president regarded as unjustifiable. Later, when the threat of a nationwide strike caused the Federal Government to take over the whole of the United States railways for a short period, after their return to private ownership, Mr. McNear, claiming that the T.P. & W. should have been returned with the others, brought a successful action to this effect in a local court. President Truman reversed this decision, and matters remained as they were. On August 25, however, President Truman issued a general directive that all properties seized by the Government during the war were to be returned to their owners as soon as practicable, and the T.P. & W. accordingly reverted to private ownership and management on October 1. As described on another page, however, the strike broke out again immediately, and from the same date traffic over the railway ceased.

Diesel Streamliner Enterprise in U.S.A.

It would appear as though competition is developing on an extensive scale for the passenger traffic between Chicago and the Pacific Coast, and that a considerable increase may be expected in the number of diesel-hauled streamline trains which provide the cream of the travel facilities. For some years the Union Pacific and the Chicago & North Western Railways have combined to provide a streamline service every third day between Chicago and both Los Angeles and San Francisco—the "City of Los Angeles" and the "City of San Francisco" respectively—and the similar "City of Portland" every sixth day between Chicago and Portland. The competing Atchison, Topeka & Santa Fe has had two streamliners in operation—the all-Pullman "Super-Chief" and the all-coach "El Capitan"—between Chicago and Los Angeles, both with twice-weekly departures. Now the Great Northern Railway, working in conjunction with the Burlington, has on order new streamline trains for the "Empire Builder" service, with which there will be daily departures from Chicago for Portland, Seattle, and other cities of the north-west; to this competition it is hardly likely that the Northern Pacific Railway, with its "North Coast Limited," and the Chicago, Milwaukee, St. Paul & Pacific, with its "Olympian," can remain altogether oblivious. Now the Burlington, with its Denver & Rio Grande and Western Pacific allies, is about to transform the "Exposition Flyer" into a diesel-hauled "Californian Zephyr" diesel streamliner, with daily departures from both Chicago and San Francisco. As the distances covered range from 2,228 to 2,532 miles, six new trains, at a total cost of at least \$10,000,000, are needed to introduce even a ten-car daily streamline train, between Chicago and the Pacific coast, so that such projects are not lightly undertaken.

Swedish Locomotives for Holland

In 1942 the Netherlands Government in London ordered from the well-known Swedish firm of Nydquist & Holm, of Trollhättan, fifteen 4-6-0 express passenger and thirty-five 0-8-0 freight locomotives. Delivery was to be made as soon as possible after the termination of hostilities. The designs corresponded with the engines of like class already in use in Holland, but Swedish practice had necessarily to be followed in certain details. Delivery of the first two freight locomotives was made at Rotterdam in August. The engines have a very pleasing appearance and the use of bar frames, combined with wheels of 1,350 mm. (4 ft. 5½ in.) dia. makes the boiler seem pitched higher than it really is. The closed-in Swedish type of cab and a bogie tender are provided. Overall length is 19,280 mm. (63 ft. 3 in.) and weight in working order, engine and tender, is 126.6 tonnes. Tender capacity is 7 tonnes of coal and 4,950 gal. of water. The motion has three cylinders, 19½ in. by 26 in. stroke (the first occasion on which this arrangement has been used in the Netherlands), driving the third axle; the valve gear of the outside cylinders is actuated by countershaft mechanism from the inside gear. All axles have roller bearings. The engine has steam, the tender—and train—Westinghouse brakes, but they are not arranged to work together.

British Railways Statistical Secrecy

IN several articles published during recent years we contrasted the public ignorance of the work done by the British railways with the detailed knowledge available as to railway operations in the U.S.A. Though "security reasons" can no longer be put forward as an excuse for suppressing statistics, we are still without a systematic review of British railway performance since the year 1938. In justice to our railway companies and to their employees, a statement of the results achieved during the war years from 1939 to 1944 should be issued at once and the publication of periodical financial and statistical returns for 1945 and future years should be resumed.

The avowed intention of the Government to nationalise the railways is in itself a sufficient ground for urging that the public should have full particulars about the railway situation. It is preposterous that three or four months after the surrender of Japan we should be destitute of official information about the working of our railway systems, whereas throughout the war we have known all that outsiders could expect to know about current railway happenings in the U.S.A. An example or two may emphasise the absurdity of the present state of affairs.

Had anyone enquired in the first week of December how the Pennsylvania Railroad was faring this year, we could have given him a comparison between its revenue and expenses for the first eight months of 1945 and 1944. Here are the figures, in millions of dollars:—

	1945	1944
Operating revenue	\$654	\$678
Operating expenses	\$503	\$495
Net railway operating income, after deducting taxes and equipment rents ...	\$72	\$73

Clearly the war traffic boom had spent its force in the Central Eastern region of America. Not so in the Central Western region, as the corresponding figures for the Union Pacific show:—

	1945	1944
Operating revenue	\$347	\$322
Operating expenses	\$220	\$212
Net railway operating income	\$28	\$24

The contrast between the results of these two railways brings out the effect of the 1945 diversion of traffic from Atlantic to Pacific ports, after VE-Day especially.

For the whole of the 132 Class 1 main-line railways in the United States the position at the end of August, 1945, as compared with the state of things at the same date in 1944, may be summed up thus:—

	Per cent.
Decrease in aggregate operating revenues	0.5
Increase in aggregate operating expenses	3.6
Decrease in net railway operating income	4.1

In consequence of these changes, the operating ratio increased from 66 per cent. in 1944 to 69 in 1945, while the rate of return on property investment declined from 4.1 to 3.8 per cent.

These results are quoted from a monthly return of railway revenues and expenses circulated by the Association of American Railroads. The August figures were available in Washington at the end of October, a feat of railway accountancy much beyond anything ever attempted in this country. The A.A.R. also publishes a weekly statement of "Revenue Freight Car Loading" with remarkable despatch. Let us suppose that our December visitor had asked whether the downward trend in freight business had continued after August. We could have told him that on November 1 the A.A.R. announced that loadings for the week ended October 27 totalled 854,800 wagons, a decrease of 61,700 wagons, or nearly 7 per cent., below the corresponding week last year. He might also have been advised that during the first 43 weeks of this year 35,148,000 wagons were loaded as compared with 36,345,000 in the same period of 1944, a decrease of 1,197,000, or over 3 per cent. If he had wished to know how the principal factors were varying, we would have explained that carryings of coal, coke, ore and forest products had declined, whereas loadings of grain, live stock and small lots of merchandise had been well maintained.

We might have added that wagon forwardings were on the down grade in Canada, too, according to the Dominion Bureau of Statistics, though the decrease to the end of October was only about 1.5 per cent. As for the wagon supply in this country, we could merely have made some vague remarks, based on hearsay, though the Inter-Company Freight Rolling Stock Control is believed to have precise day-to-day records.

There never was a time when it was so important as it is

today that we should have comprehensive statistics about every branch of the country's activities. In a leading article dealing with demobilisation and reconversion, *The Times* of December 10 pointed out the advantage of receiving from the Minister of Labour "fuller labour statistics of every kind than at any time since war broke out," but stressed the lack of "a monthly report on the numbers of workers employed in each industry and trade, which could serve as a running index of the speed of expansion in different branches of production." There is no reason why the Minister of War Transport should not be equally forthcoming, and straightaway lift the veil of secrecy which obscures our railway operations. It is at once aggravating and amusing to remember that in August last the Provisional Organisation for European Inland Transport (now E.C.I.T.O.) announced from Berkeley Square House that a monthly report would be issued to summarise the principal developments affecting inland transport in Continental Europe. Emphasis, it was added, would be placed on the amount, and physical condition, of existing facilities and equipment and the use to which they were being put. So the present indications are that we shall soon be in the position of knowing month by month everything about American railways and a good deal about transport on the Continent, but next to nothing about developments in Great Britain.

Railway Developments of 1846

EIGHTEEN hundred and forty-six was an outstanding year in the history of railway development. No fewer than 272 railway acts became law, and it has passed into history as "the year of railway mania and panic." The repeal of the Corn Laws in 1846 was followed by the collapse of the Peel Government, and Lord John Russell became the Premier of a Liberal administration. There was a remarkable—almost unprecedented—example of party politics being subordinated to the national interest. Dalhousie, "the greatest of Indian pro-consuls," had been at the Board of Trade under Peel, and had won a great reputation by his ability in dealing with the rapid railway development. Even his political opponents were impressed, and Russell asked Dalhousie to remain in office to continue to handle the critical rail problem—but Dalhousie could not see his way to accept the offer.

The most critical day occurred, not in 1846, but on November 30, 1845, because, by the enactments then in force, it was necessary that all the railway schemes prepared for any year should be submitted to the Board of Trade on or before November 30 in the preceding year. Delane was then in control of *The Times*, and at great financial loss he exposed many of the fantastic schemes that inevitably accompanied a mushroom development. He had devoted three pages to an elaborate analysis of the schemes proposed. They numbered 620 (involving an expenditure of £560 millions), in addition to which 643 had not advanced beyond the prospectus stage. More than 500 went through all processes necessary before being introduced in the Commons, and 272 became law during 1846. They authorised the construction of some 4,540 miles of new railway, and the raising of new capital to the extent of £95,625,934, with borrowing powers for an additional £36,087,272.

George Hudson, the "railway king," became Lord Mayor of York in 1846, and Delane's realisation of the news value of railways, and anything appertaining thereto, was shown when, on Hudson's return as M.P. for Sunderland at a by-election in the previous year, *The Times* chartered a special train to take the news to London.

During 1846, the total of 605½ miles of new line brought into service represented the greatest aggregate mileage that had been opened in a single year. A substantial portion of it had been sanctioned in 1844 and represented the revival of interest in the railway industry. Much of the total was made up of a number of small items rather than of lines of first-class importance. The principal openings are tabulated on page 662. It is worthy of note that the total mileage opened exceeded by 78 miles the previous record, which was that of 1840, in which the maximum figure resulting from the first railway boom was obtained; we commented on this in our issue of January 5, 1940 (page 2).

Incidentally, policies advocated in 1946 were nearly anticipated in 1846. Dalhousie had wished to subject the con-

struction and management of railways to government control, "directly but not vexatiously exercised." Peel, however, was adamant against the proposal. When, in the next year, Dalhousie was appointed Governor-General of India, he was able to put his principles into effect, and in his subsequent work on Indian railways he wrote that had his policy been in force in England "it would have placed the proprietors of railway property in England and the suffering public in a better condition now than they appear to be."

Amalgamation resulted in the formation of two of the great pre-Grouping railways, namely, the London & North Western Railway, which was formed on July 16, 1846, by amalgamation of the London & Birmingham, Grand Junction, and Manchester & Birmingham Railways; and the London, Brighton & South Coast Railway, which assumed this title on July 1, when the original London & Brighton Railway amalgamated with the London & Croydon Railway.

Besides the repeal of the Corn Laws, and the great railway boom, Great Britain was shaken in 1846 by the Irish potato famine. Lord George Bentinck, who became that year leader of the dissentient Protectionists, proposed as a palliative the construction of Irish railways, to employ 110,000 men, at a cost of £16,000,000, but the Government was hostile to the scheme.

Among the measures which passed Parliament in 1846 was the famous "Campbell's Act," which provided for the payment of compensation to families of persons killed in railway accidents; and on August 28 that year an Act was passed which transferred jurisdiction over railways from the Board of Trade to a body of railway commissioners (which was, however, repealed five years later, when the authority of the Board of Trade was restored).

George Stephenson, "Father of English Railways," had won the first of two battles when Parliament decided in favour of the locomotive against the "heresy" of Brunel's atmospheric railway system; and he was vigorously combating the mad schemes which were making railway development "railway mania." Sir John Fowler (of Metropolitan Railway and Forth Bridge fame) also took an active part in the struggles over the numerous railway acts of the year. In May, Robert Stephenson began his great work, the construction of the Britannia Tubular Bridge over the Menai Strait.

Spencer Walpole, that famous Home Secretary, and Chairman of the G.W.R., made his Parliamentary debut in 1846. Herbert Spencer, the philosopher (who had said "Got the sack—very glad," when the Birmingham & Gloucester Railway was completed) left railway work for ever that year; whereas that famous natural philosopher, John Tyndall (although, like Spencer, destined to change practical work for academic) was still working as a railway engineer.

Pius IX was elected Pope in 1846, and began his pontificate with a programme of reform, in the forefront of which was railway construction. The versatile William Pole (F.R.S., and expert on music and whist, as well as engineer) was surveying that year for the Great Indian Peninsula Railway; that popular Victorian, Samuel ("Self-Help") Smiles, was Secretary of the Leeds & Thirsk Railway; and Sir Daniel Gooch constructed the famous *North Briton*, from which all engines for broad-gauge express trains were designed.

On March 2, 1846, Sir Samuel Morton Peto and Thomas Grissell dissolved the firm of Grissell & Peto; Peto took over the railway contracts, which included the construction of a large portion of the South Eastern Railway (between Folkestone and Hythe, including the viaduct and tunnel, and the martello towers), and the Dorsetshire section of the L.S.W.R. In the same year Edward Ladd Betts, who had undertaken the construction of the South Eastern Railway between Reigate and Folkestone, entered into partnership with Peto.

George Rennie in 1846 was appointed Chief Engineer of the Namur & Liège Railway; and his brother, Sir John (who designed railways in Sweden and Portugal), gave a complete history of civil engineering as his Presidential Address to the Institution of Civil Engineers. That great railway promoter, Sir Edward William Watkin (ardent advocate of a Channel Tunnel), was Secretary that year of the Trent Valley Railway, which was sold to the L.N.W.R.

Two celebrities famous in the non-constructional phase of railway development were active in 1846. George Bradshaw

was finding the rapid railway evolution a fillip for the work which was to make his name a household word; and Thomas Cook, since the previous year, had made the organising of excursions at Leicester a regular occupation, getting a percentage from the Midland on tickets sold.

In 1845 Cooke and Wheatstone had perfected the electric telegraph, which was quickly adopted on all railway lines. The two inventors had quarrelled, but had come to an arrangement, and in 1846 the Electric Telegraph Company was formed, and paid £120,000 for Cooke and Wheatstone's earlier patents.

The obituaries of 1846 included John Owens (May 31), founder of Manchester University, who acquired much of the wealth which made that foundation possible from railway speculation; and Joseph Constantine Carpue (January 30), a noted surgeon and anatomist, who died in his eighty-second year, as the result of being severely shaken in an accident at the opening of the South Western Railway.

On August 22 occurs the centenary of the birth of Sir Henry William Primrose, who, in 1913, served under the chairmanship of Earl Loreburn on a Royal Commission on Railways, which was abruptly ended by the war of 1914-18. The centenary of Loreburn occurs on April 3. He was a double blue at Oxford, and President of the M.C.C., and became Lord Chancellor under "C.-B." and Asquith. His Chairmanship of the Commission on Railways recalls that when he was a junior at the Bar he broke with the tradition that barristers on circuit must travel first class, stating frankly that he could not afford it, and manifesting complete indifference as to what his confrères might think.

On October 20, 1846, was born Sir William MacGregor, who, as Governor of Lagos, helped to develop that country by opening railways. He was described by Lord Bryce as "a model of what a colonial governor should be." Sir Edward Fitzgerald Law, a noted diplomat, and expert on state finance, was born on November 2, 1846. He advocated British association with Germany in the Baghdad Railway, with British control of the section from Baghdad to the Persian Gulf.

* * * *

Leopoldina Railway Company

THE accounts of the Leopoldina Railway Co. Ltd. for the year ended December 31, 1944, show an increase of £578,438 or 30·08 per cent. in gross receipts, and working expenses to have increased by £479,249 or 27·24 per cent. The operating ratio was 89·5 as compared with 91·5. The net receipts came out at £262,656. To these is added a credit of £7,806 for interest and other items, but £23,945 had to be deducted for premium on conversion of debentures and transfer to reserve for redemption of debenture stock, leaving £246,517 to meet the liabilities of £382,717 postponed under the scheme of arrangement, thus resulting in a loss of £136,200 for the year. The number of passengers carried increased by 12·7 per cent. and the receipts therefrom by 37·07 per cent. Parcels and baggage receipts showed an increase of £660,290 or 36·84 per cent. and the tonnage of goods traffic increased by 4·32 per cent., the receipts advancing by 24·47 per cent. The carriage of sugar, including sugar cane, improved from 534,000 tons in 1943 to 631,000 tons in 1944, an increase of 97,000 tons, and coffee traffic showed little variation at 147,000 tons as against 155,000 tons. Some operating figures are given below:

	1943	1944
Miles open	1,918	1,918
Passengers	32,102,353	36,181,372
Goods and livestock, tons	1,942,208	2,026,079
Operating ratio, per cent.	91·50	89·50
Passenger receipts	£ 523,431	£ 717,479
Goods and livestock receipts	1,209,559	1,505,489
Gross receipts	1,722,716	2,501,154
Working expenses	1,759,249	2,238,498
Net receipts	163,467	262,656

There was again a rise in the fuel bill, the increase in which amounted to £73,000 or 14 per cent., mainly due to the consumption of imported coal. The consumption of wood fuel remained at the high level reached in the previous year. Expenditure on wages, and statutory contributions assessed thereon, accounted for £220,000 of the total increase of £480,000 in working expenses. The total debit balance of the net revenue account now stands at £2,120,586.

LETTERS TO THE EDITOR

(The Editor is not responsible for the opinions of correspondents)

Compartment or Open Stock for Suburban Services

10, The Glen, Eastcote,
Pinner, Middlesex. December 12
TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—Like your correspondent, Mr. L. G. Guiver, I also am a regular traveller on the Metropolitan section of London Transport. Whilst I do not wish to enter the discussion regarding compartment or open stock for suburban services, I would confirm that there is a growing tendency for passengers on the Uxbridge Line to change at Harrow-on-the-Hill (particularly on westbound journeys), but I would suggest that this arises from two causes. First, as Mr. Guiver states, every passenger wants a seat if he can procure one, especially on journeys which exceed half-an-hour; and the compartment stock coaches seat approximately twice the number of an open-stock car. But some passengers use the Harrow trains, composed of open stock, if they can get a seat on one of these, changing at Harrow, to stand from there in one of the Uxbridge line trains.

But the other reason is that the Watford line trains are faster, as they often pass Wembley Park, Preston Road, and Northwick Park. As an instance of this, I would specify the 5.35 p.m. (Monday-Friday) *ex-Farringdon* to Watford, due at Harrow-on-the-Hill at 6.5 p.m. Passengers usually can connect with the 6.6 p.m. Uxbridge train, which starts at Baker Street. There have been many local requests that certain Uxbridge trains should run fast in a similar manner to the Watford trains, especially as the journeys are approximately equal in time.

Again, two or three people in this district now travel by 220 bus to Pinner and thence by Watford line trains rather than use Eastcote station on the Uxbridge line, which is within walking distance, due to the standing conditions on the Uxbridge line, though in fairness to London Transport, it should be pointed out that conditions have tended to become worse in the last two or three months.

To test public reaction, and to see if it would ease the Uxbridge line standing position, I suggest that certain sets of compartment stock (train Nos. 1 to 8) which at present work in the peaks only on the Watford and Rickmansworth lines, should operate on the Uxbridge line in exchange for an equal number of open stock (train Nos. 21 to 32), which at present work in peaks only on the Uxbridge line.

Yours faithfully,
N. S. EAGLES16, Colebrooke Drive,
Wanstead, E.11. December 3

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—I can assure Mr. Burow that I have on many occasions travelled in both forms of coach in all circumstances.

I wrote my previous letter to express my own opinion as to the degree of comfort and amenity provided in both forms of stock. I maintain that in normal times standing in compartment stock is to a large extent not called for, whereas in open stock both now, and apparently in the future, it is to be very largely a normal form of travel. Six years of restricted train services may have implanted the idea in the minds of many, that standing is a normal part of travel, but under ordinary conditions with a more or less adequate train service, standing is the exception rather than the rule in compartment stock.

I think that generally the railway traveller looks for a seat, a rack for luggage and parcels, and as much comfort and privacy as possible.

One of the greatest inconveniences on the Underground system (except on certain Metropolitan trains), has always been the lack of a luggage van or facilities for disposing of luggage in the ordinary open coach. During holiday periods a large part of the floor is taken up with passengers' luggage, and during the war the kit bags of Services' personnel has greatly increased the amount of luggage occupying floor space.

With the wide extension of the Underground system, this lack of accommodation for bicycles, perambulators, and so on, must prove increasingly inconvenient.

With regard to the concluding paragraph of Mr. Burow's letter, we are threatened with the introduction of open car stock on the L.N.E.R. suburban services (apart from the extension of the L.P.T.B. Tube), although the L.N.E.R. must be in possession of quite as much compartment stock, most of it in good condition apart from interior decorations in many instances, as was the Southern Railway when its suburban electrification was undertaken.

I would like to conclude my letter with one or two sidelights on the question. Several months ago I joined a District Rail-

way train at Bow Road Station, and got into an almost empty car in which three small boys were playing football!

Some years ago I remember reading that a student who had recently taken a Degree at London University had done most of his reading in a train between London and Reading.

Some years ago when the overcrowding on the Ilford line was very much commented on, it was noticeable that although fast trains carried many standing passengers, stopping trains leaving a few minutes later and taking a few minutes longer on the journey usually had spare seats.

Yours faithfully,
C. F. KING

"The Railway Gazette"

CHESHIRE LINES COMMITTEE,
Central Station,
Liverpool, 1. December 11

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—I cannot express to you adequately the extent to which I enjoy reading *The Railway Gazette* at the week-end. In these days of impending great changes it is a consolation to know that we have in the articles appearing in our leading railway organ a fearless expression of informed opinion, and written in real English. Never, I feel sure, has *The Railway Gazette* in its history risen to such heights, and all I can say in conclusion is, "*Floreat Railway Gazette*"!

Yours faithfully,
GERALD LEEDAM,
Secretary & Manager

The Evolution of the L.B.S.C.R.

Hurst Wickham,
Sussex. October 16

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—The Groombridge-Uckfield line was opened in two sections, the first to Crowborough, 5½ miles, the second Crowborough to Uckfield, 7 miles, with an interval of about six months between them. During this period connection between Uckfield and the northern completed section was by bus.

A friend, a few years ago, told me he remembered when a boy travelling from Tunbridge Wells to Uckfield; part of the journey was by bus, which ran in connection with the trains. Reference to the relative *Bradshaw's Manual* gave the opening dates of the two sections.

In one of the Acts concerning the Uckfield Railway, *Bradshaw's Manual* states that powers were given to widen the Lewes Tunnel. This may refer only to the Lewes exit at the station end, mentioned by the late Dendy Marshall, *History of the Southern Railway*, p. 318. The actual widening of the tunnel was carried out a few years ago, nearly 70 years after the Uckfield trains used the tunnel.

The real reason for the alteration of the approach to Lewes for the Uckfield line was to enable trains to and from Groombridge, etc., and Brighton, etc., to do so without reversing at Lewes.

The length of the abandoned portion of the Uckfield line, so far as I can gauge it, was a mile or so. The Uckfield branch diverged from the Lewes-Keymer branch at Hamsey, about 2 miles west of Lewes. The embankment is still there, up to the river, which was crossed by a bridge. The new (1868) line runs close to the river on the north side, between the point where it left the original line to Lewes.

The distance from the present Lewes Station to Culver Junction on the Groombridge line is 3 m. 19 ch., of which I assume 2 miles or so were new line.

This is merely from personal acquaintance with the district, except the 3 m. 19 ch. The other distances are assumptive on my part, so far as they relate to the original line between Culver Junction and Lewes.

Yours faithfully,
G. A. SEKON

CONTROL OF IRON AND STEEL.—The Minister of Supply has made the Control of Iron & Steel (No. 45) Order, 1945, under which the following materials may be acquired without licence: (1) Ferro-alloys (other than spiegeleisen and ferromanganese smelted in a blast furnace); (2) calcium silicide; (3) tungsten metal powder, tungsten metal sintered lamps, tungsten metal scrap; (4) titanium carbide; (5) cemented carbide hard metal; (6) molybdenum metal powder, molybdenum metal scrap; (7) any chemical compound of molybdenum or tungsten or vanadium. Copies of the Order (S.R. & O. 1945 No. 1502) may be obtained from H.M. Stationery Office, York House, Kingsway, W.C.2, price 1d.

The Scrap Heap

FROM THE DIARY OF A VERY UNIMPORTANT PERSON

Belfast, Larne, Stranraer, and Euston in sequence; December, 1943. The crossing from Larne was of such undiluted misery, that I question if the presence of U-boats could have occasioned additional discomfort. Worse was to follow—the fight for accommodation on the train at Stranraer.

How I envied ministry officials, who with undeniable authority, collared sleeping berths—my prayer that the Minister might view the human maelstrom went unheeded, as did my hopes that consideration would be extended to the ordinary business man, who was doing a job of national importance, and who was deserving, therefore, of at least a chance in the highly unlikely section of the sleeper draw.

Later, I boarded the train, using two cases as fenders, and through the good offices of two Canadians, was given a third share in a twin seat, and prepared for purgatory. I was lucky compared with those who were strewn (stretched was technically impossible) on the floor, in the luggage grids and on table ends.

Of the journey to Crewe I will say little, other than to remark that it was increasingly borne on my consciousness that my assumption that lavatory accommodation had been provided was correct, and I fell to wondering why no high pressure salesman had tackled the L.M.S.R. Buying Department with a strong line of deodorants.

On arriving at Crewe—feeling incredibly dirty, thirsty, hungry, weary, and thoroughly at odds with the world in general—I became the proud though somewhat selfconscious possessor of half a seat, and had also realised the aptness of the title "The Iron Road."

To my jaundiced eye, the sight of a clean, well-fed, happy looking L.M.S.R. official (who had just joined the train) was terrible. As I recall his uniform, it was brownish with a hell of a lot of silver braid, and when this cove after examining my ticket vouchsafed the comment that riding Third was unnecessary as there was room in a First elsewhere, my blood pressure soared, but my sensibilities—(olfactory excluded) were so dulled that I lacked the urge to describe the "women and children last" at Stranraer. It is obviously unfair to expect Inspectors to have the tact of a P.R.O. as this peculiar breed

of Human Buffer with Distinction in Higher Apologia is unique, but I confess that since this incident I have been allergic to silver braided brownish uniforms. After further digressions we trickled into Euston around 1 p.m.—the only time I have ever held that tomb in affectionate esteem—having left Belfast at tea-time the previous day. I tottered in the buffet at the bottom of No. 7 and there secured the last "Double" available, and this ironically enough bore the name of a locomotive, which like myself had journeyed many miles and survived for further trials. Yes, my journey was VITALLY necessary.

RAILWAY QUESTIONS AND ANSWERS

Statement: In most countries of the world the railways are owned or controlled by the State.

Answer: This statement is wrong. Nearly half of all the railways of the world are privately owned. The actual figures are: 47 per cent. of the total railway mileage of all countries in the world is owned and operated by private enterprise; 53 per cent. is State-owned.—From "Answers to Questions and Statements," issued by the British Main-Line Railway Companies, 22, Palace Chambers, London, S.W.1.

The G.W.R. recently removed 20 container loads of books for the British Museum stored in the Bodleian Library during the war. Representatives of the museum accompanied the trains.

100 YEARS AGO

From THE RAILWAY TIMES, Dec. 27, 1845

LONDON AND BIRMINGHAM RAILWAY.

NOTICE.—The following Reductions in the Fares of Passengers, and the Rates for Parcels, between London, Birmingham, and Liverpool, will take place on the First January, 1846:—

LONDON to LIVERPOOL.			
FARES OF PASSENGERS.			
By Express and Select Trains	from 47s. to 45s.		
By other Trains, First Class	from 40s. to 37s.		
Do. Second Class	from 31s. to 27s.		
From LONDON to BIRMINGHAM the Reductions will be			
FARES OF PASSENGERS.			
By Express and Select Trains, 1st Class	from 27s. to 25s.		
By Mixed Fast "do. "do.	from 24s. to 20s.		
Do. "do. Second Class	from 17s. to 14s.		

The Fares for intermediate distances will be reduced in proportion. The rates for small parcels, not exceeding 12lbs. weight, will be reduced between London and Liverpool, from 2s. 6d. to 2s.; and between London and Birmingham, from 1s. 6d. up, and 1s. 3d. down, to 1s. each way.

By order,

R. CREED, Secretary.

Office, Euston Station, Dec. 24, 1845.

Railway Centenaries of 1946

Jan. 16.—Maryport to Workington opened (5½ miles), Whitehaven Junction Railway.

Feb. 6.—Ashford to Canterbury opened (14½ miles), South Eastern Railway.

Feb. 6.—Lytham branch opened (4½ miles), Preston & Wyre Railway.

Feb. 19.—Trinity to Granton opened (1 mile), Edinburgh, Leith & Granton Railway.

Mar. 18.—Worthing to Littlehampton (Lyminster) opened (7½ miles), London & Brighton Railway.

Apr. 13.—Canterbury to Ramsgate opened (15½ miles), South Eastern Railway.

Apr. 29.—Stratford to River Lea (Canning Town) opened (2½ miles), Eastern Counties & Thames Junction Railway.

June 4.—Middlesbrough to Redcar opened (7½ miles), Middlesbrough & Redcar Railway.

June 8.—Brighton to Lewes opened (8 miles), London & Brighton Railway.

June 8.—Littlehampton (Lyminster) to Chichester opened (10½ miles), London & Brighton Railway.

June 15.—Colchester to Ipswich opened (17 miles), Eastern Union Railway.

June 18.—Edinburgh to Berwick opened (57½ miles), also Haddington branch (4½ miles), North British Railway.

June 27.—Lewes to Bulverhythe, St. Leonards, opened (24½ miles), London & Brighton Railway.

July 1.—Main line and Hunslet Junction line opened (14½ miles), Leeds & Bradford Railway.

July 16.—L.N.W.R. formed by amalgamation of London & Birmingham, Grand Junction, and Manchester & Birmingham Railways. (The Grand Junction had previously absorbed the Liverpool & Manchester Railway.)

July 20.—Barrow and Piel to Kirkby Ireth and Dalton opened for freight traffic (15 miles); opened for passenger traffic August 24, Furness Railway.

July 27.—Battersea to Richmond opened (6 miles), Richmond Railway.

Aug. 1.—Haymarket to North Bridge, Edinburgh, opened (1 mile), Edinburgh & Glasgow Railway.

Aug. 4.—Nottingham to Lincoln opened (33 miles), Midland Railway.

Aug. 4.—Dublin to Carlow opened (56½ miles), Great Southern & Western Railway.

Sept. 2.—Syston to Melton Mowbray opened (10½ miles), Midland Railway.

Sept. 22.—Lancaster to Oxenholme opened (20 miles), Lancaster & Carlisle Railway.

Sept. 22.—Oxholme to Kendal opened (2 miles), Kendal & Windermere Railway.

Oct. 2.—Stamford to Peterborough opened (12½ miles), Midland Railway.

Oct. 6.—Hull to Bridlington opened (31 miles), York & North Midland Railway.

Oct. 27.—Lynn to Downham Market opened (10½ miles), Lynn & Ely Railway.

Nov. 7.—St. Leonards extension, Bulverhythe to Bopeep opened (½ mile), London, Brighton & South Coast Railway.

Nov. 16.—Bletchley to Bedford opened (16½ miles), London & North Western Railway.

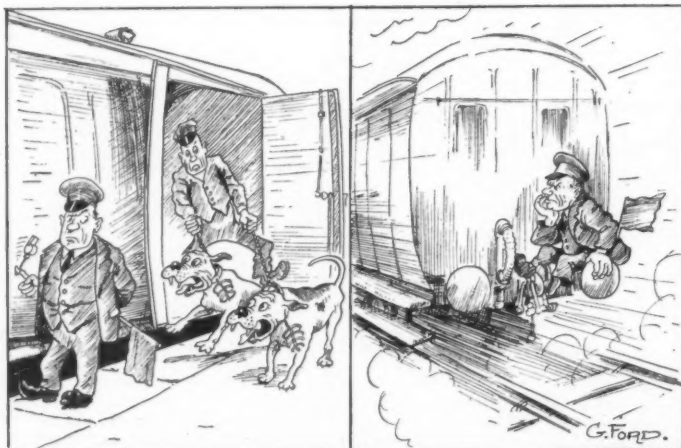
Nov. 25.—Tunbridge Wells temporary station to Mount Pleasant opened (1 mile), South Eastern Railway.

Nov. 30.—Ipswich to Bury opened (26½ miles), Ipswich, Bury & Norwich Railway for freight traffic; opened for passenger traffic December 24.

Dec. 1.—Ramsgate to Margate opened (3½ miles), South Eastern Railway.

Dec. 17.—Oxenholme to Carlisle opened (50 miles), Lancaster & Carlisle Railway.

Dec. 30.—Teignmouth to Newton Abbot opened (5½ miles), South Devon Railway.



Safety first

OVERSEAS RAILWAY AFFAIRS

(From our correspondents)

SOUTH AFRICA

Financial Results, for August

The operation of the railways, harbours, steamships, and airways for August, 1945, resulted in a net deficit of £226,656, which is £48,592 greater than the deficit incurred in August, 1944. The total revenue from all services continued to rise and was £748,305 in excess of the corresponding figure for last year; this increase was derived mainly from passenger, goods and coal traffic, and from catering and road-motor services. Total expenditure rose by £796,897, due to the payment of increased salaries and wages and higher cost of living allowances, together with increased maintenance and operating costs.

The working for the five months April to August reflects an accumulated deficit of £1,142,540, which compares unfavourably with the corresponding figure for 1944, when the deficit stood at £646,092, or only just over one-half of the total for the current period.

Private Wagon Manufacture

The manufacture of railway wagons in South Africa is assuming substantial proportions and the railways are drawing supplies not only from railway workshops but also from private firms. Railway workshops are at present engaged chiefly on wagon repair work, and manufacture has had to be relegated to secondary importance for the time being.

Production by private enterprise dates back to September 1943, when the Minister of Transport, Mr. F. C. Sturrock, had an order placed with Dorman, Long (Africa) Limited, for 1,000 wagons. The first pilot wagon was completed in November, 1944, and 296 wagons had been delivered by September 30, 1945. The present production rate is ten a week.

Electrification of Goods Yards

All goods yards in the Reef area are being equipped for electric working. Work on the electrification of the Angelo down yard and the Langlaagte yard is proceeding satisfactorily, and the provision of overhead equipment for the Elandsfontein marshalling yard is practically completed.

UNITED STATES

Toledo, Peoria & Western Strike

In accordance with a decision of President Truman, that organisations which had been taken over as a wartime measure by the Federal Government, for a variety of reasons, should be returned to their owners at the earliest possible date after the end of the war, the Toledo, Peoria & Western Railroad was returned on October 1, 1945.

The original seizure and subsequent Federal administration, from March 22, 1942, had been the result of a strike of employees, in consequence of the railway refusing to apply certain union rules which it considered unnecessary and uneconomical.

As had been generally expected, the strike broke out again immediately control of the railway was reassumed by Mr. G. P. McNear, the President. It is claimed by him that voluntary increases of pay had been granted to the men, which would leave them better off than under Federal management. Employment was offered only to those of the staff who had been in T. P. & W. employ before the seizure, and to as many of those engaged by the Federal manager as might still be needed;

but the railway company declined to re-engage 25 men who were alleged to have taken part in acts of violence at the time of the original strike, and it is chiefly this which has precipitated the renewal of the strike.

Northern Pacific to Work a Navy Line

Some of the railways built during the war by, or for the use of, the United States Armed Forces are of considerable extent. One such, constructed by the U.S. Navy in the State of Washington to serve the Bremerton Navy Yard, at a cost of \$7,500,000, has a total length, with branches, of 48 miles, and serves both the yard and neighbouring magazines and ammunition depots which previously were accessible by water only. An examiner of the Interstate Commerce Commission has recommended that the I.C.C. approve an arrangement whereby the Northern Pacific Railway would operate the Bremerton system, subject to this company coming to an agreement with the Union Pacific and Chicago, Milwaukee, St. Paul & Pacific Railroads as to joint rates on traffic for Bremerton originating on the two last-named systems. Such rates should compensate the Union Pacific and the Milwaukee for loss of traffic which otherwise they would have hauled on their own lines through to the Pacific Coast ports and thence by water.

ARGENTINA

Labour Party Programme

The newly-created Argentine Labour Party, which will support Colonel Perón's candidature for the Presidency, launched its electoral campaign on November 15 and made formal application for registration at the Electoral Secretariat. Widespread and fundamental changes are included in the party's programme, outstanding in which is the intention of nationalising all privately-owned railway, telephones and electricity companies operating in Argentina. An unusual item in the 48-point programme is the suppression of surface railway lines.

The Labour Party programme touches almost every aspect of civil life in Argentina. The following are the more important points contained in the programme: (1) defence of the social benefits attained and their conversion into laws; (2) revision of laws concerning, and study of the standard of living of, employees of private companies, so that they may be brought into line with public servants; (3) creation of a national real estate valuation chamber to fix taxes, municipal and national, on property's real value; (4) study of a system of rent on the basis of square metres occupied, according to district; (5) revision of all national and municipal taxes and reduction of fiscal charges; (6) urban development and national roads plan, using the proceeds from the petrol surcharge; (7) construction of thousands of workers' houses with State funds; (8) revision of public-service companies' rates and strict control of concessions and capital investments, and technical and economic rationalisation of the public debt to reduce it to reasonable limits; (9) supervision of the various pension funds so that long-standing members may be able to collect their pensions in the same way as the newer ones; (10) regulation of passenger transport and exclusion of monopolistic capital trusts; (11) suppression of surface railway lines; (12) nationalisation of all sources of energy for the purpose of their use for the produc-

tion of electric power; (13) nationalisation of all privately-owned railways, telephones and electricity companies; (14) Labour Secretariat to be converted into Ministry.

EIRE

Wagon Construction

The first part of a wagon-construction scheme has been undertaken by the Irish Transport Company (Coras Iompair Eireann) at its Inchicore Works, Dublin. Work on the initial batch of one hundred 12-ton open goods wagons has begun, and the vehicles are being placed in traffic at once. They will be numbered 11817 to 11916 inclusive.

During the last five years the abnormal weight of traffic created by the lack of road transport and the considerable increase in agricultural and industrial activity within the country has placed a severe strain on the company's wagon stock, and under a priority system for the conveyance of goods imposed by the Government, C.I.E. wagons are estimated to have been operating at a rate equal to four times their normal capacity. The incidence of breakdown and defects in wagons has increased seriously during the last two years, and at least 500 new vehicles are required urgently.

GREECE

Salonika-Rodopolis-Alexandropolis Service Resumed

On October 1 the Hellenic State Railways train service from Salonika to Rodopolis and then to Alexandropolis was resumed. The necessary repairs for the reconstruction of the line between Salonika and Alexandropolis included:—

(1) The cutting and drilling of holes for fishplate bolts in 7,134 rails, which have been cut in the middle by cutting charges.

(2) The rebuilding of abutments and piers, and building up by using old spans or new Bailey bridges given by the British Army, of (a) 128 culverts and bridges up to 10 metres span, altogether 141 spans (385 metres of destroyed bridging); (b) two bridges of over 20 metre span; and (c) one bridge over the Gallikos River with six spans of 21 metres and one span of 11 metres.

Piraeus-Athens-Peloponnesus Railways

The Piraeus-Athens-Peloponnesus Railways Company (S.P.A.P.) is still a private company under liquidation and not incorporated in the Hellenic State Railways. The State is acting as liquidator, and has taken up the operation of the S.P.A.P. lines, according to Law 2378/1940. The management of the S.P.A.P. is still carried out according to company status. The system consists of some 500 miles of metre-gauge single-line, and about 14 miles of partly-rack railway of 0.75-metre gauge.

Considerable damage was done by the German Army to the permanent way and other installations. Sixty bridges or culverts and eight water-supply installations were destroyed. Buildings, however, were generally undamaged.

Out of 88 locomotives, there remained only 16, of which eight were in traffic, four under repair, and four awaiting repair. There are now 12 railcars, 48 passenger coaches and 275 goods wagons; the rest either were run into the sea between Athens and Corinth, or into the Corinth Canal.

On October 3, a combined rail and motor service was started from Piraeus to Patras, and to Nauplia, Tripolis, and Kalamata, after repair of the lines between Megara and the Corinth Canal; this included the reconstruction of seven bridges of 4 to 26 metres span and of a total length of 180 metres.

Some Notes on the "Merchant Navy" Class Locomotives, Southern Railway—2*

Mr. O. V. S. Bulleid's account of how operating requirements dictated the design, and how permanent way restrictions were overcome in its development

THE welding technique is as follows.

The foundation ring is placed on a jig and levelled, and the sides, back, throat, and tube plates are bolted in position. All the joints between these members are single "V" butt-welds with the edges bevelled to give an included angle of 70 deg. with a $\frac{1}{8}$ -in. root face. Distance pieces $\frac{3}{8}$ in. thick are placed between the plate edges, and the plates are tacked in position. After checking for alignment, the assembly

Although $\frac{3}{8}$ -in. thick distance pieces are used between the plates, contraction between them while welding is sufficient to squeeze the distance pieces down to a thickness of $\frac{1}{8}$ in., the design figure. Similar methods are used in constructing the outer firebox.

The electrodes used are of the solid extruded type using an arc voltage of 28-30, with a current of 150-160 amp. for an 8-gauge electrode, and 190 amp. for a 6-

gauge. All pressings are stress-relieved before welding and all welding is examined by X-ray photographs. The boxes are not annealed after welding.

The manufacture of thermic syphons involves the use of press blocks specially designed for the purpose. The method of flanging is adopted for cold-working the plates, which are of special firebox quality. The syphon is made from a single sheet. The operations on the plate are:—(1) forming the flanges for attachment to the crown plate; (2) forming the bulges which support the brick arch; (3) folding the plate; (4) forming the cylindrical neck which connects the syphon to the throat plate, and the back and front flanges; (5) electrically welding the syphon on the front, back, and neck; (6) fitting and riveting screwed stays in the flat sides of the syphon.

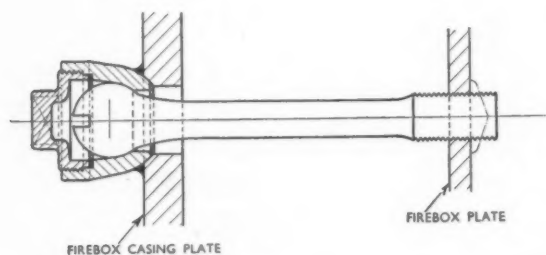
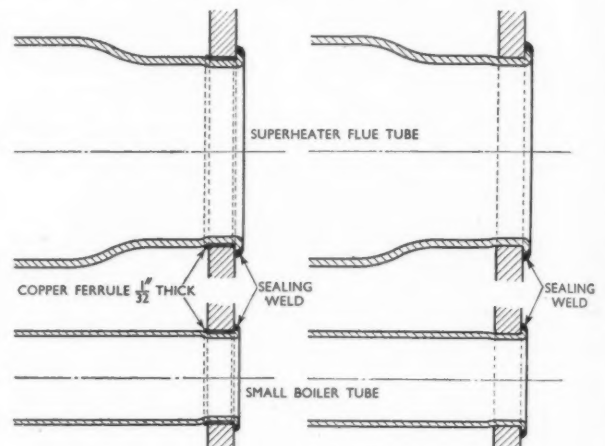


Fig. 2 (above)—Flexible stays round syphon neck

Fig. 3 (right)—Fastening of tube in firebox tubeplate



is placed in a manipulator so that all welds may be made in the down-hand position. Stiffening bars, bolted to the plates, prevent distortion.

The first runs, using 8-gauge electrodes, are made by two welders, working simultaneously on the fire side of the joints between the side and throat and side and back plates, respectively. These runs are then cleared of slag, chipped, ground, and inspected.

The second run on each joint is made by a 6-gauge electrode, and these runs are dealt with similarly. The third and final run on the fire side follows, using a 6-gauge electrode; this run, which provides a reinforcement of 10 per cent. on the plate thickness at the centre of the weld, is thoroughly cleared of slag.

To complete the joint, the surface of the first run on the water side of the joint is chipped out, ground and inspected for the sealing run which is made by an 8-gauge electrode. This run is also thoroughly cleared of slag. Defects in each run are cut out before proceeding with the next run. The syphons are fitted and tack welded with stiffening bars bolted to the crown of the box to prevent distortion. The "back step" method, performed by two welders, is used for the syphon joint at the crown.

*Paper by Mr. O. V. S. Bulleid, Vice-President I.Mech.E. (Chief Mechanical Engineer, Southern Railway), presented before the Institution of Mechanical Engineers on December 14, 1945. Abridged. Part 1 appeared in our December 21 issue.

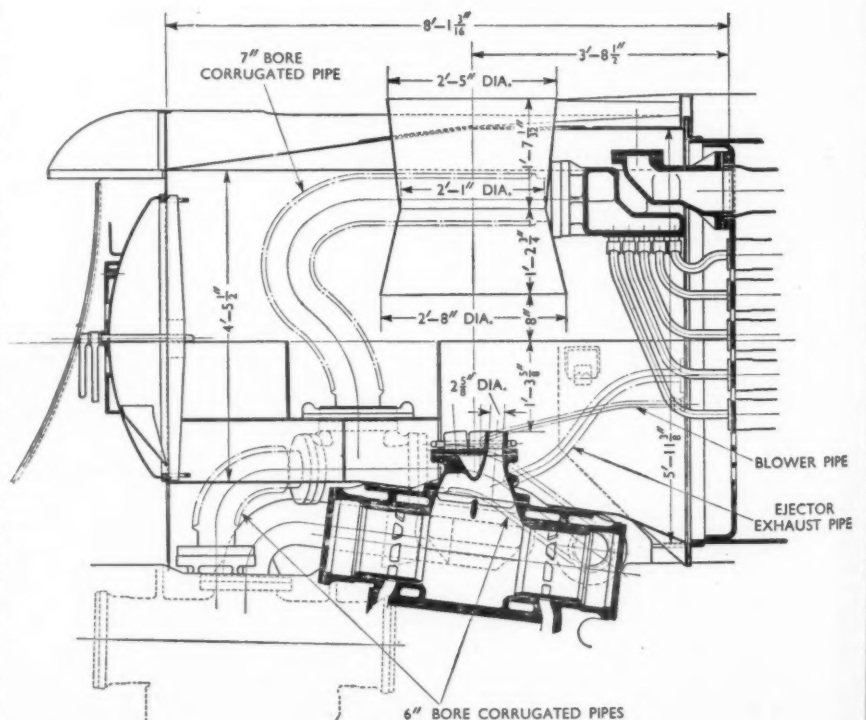


Fig. 4—Smokebox

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On completion the syphons are tested by hydraulic pressure to 50 per cent. above the working pressure of the boiler.

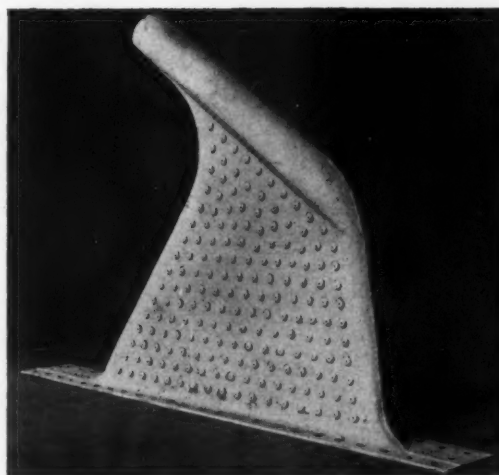
These syphons have been made for the Southern Railway by a manufacturer. All welds are examined by modern industrial X-ray apparatus in the Southern Railway workshops.

In view of the diverse opinions held in this country on the steel firebox, it will be of interest to record the troubles experienced and how they have been overcome.

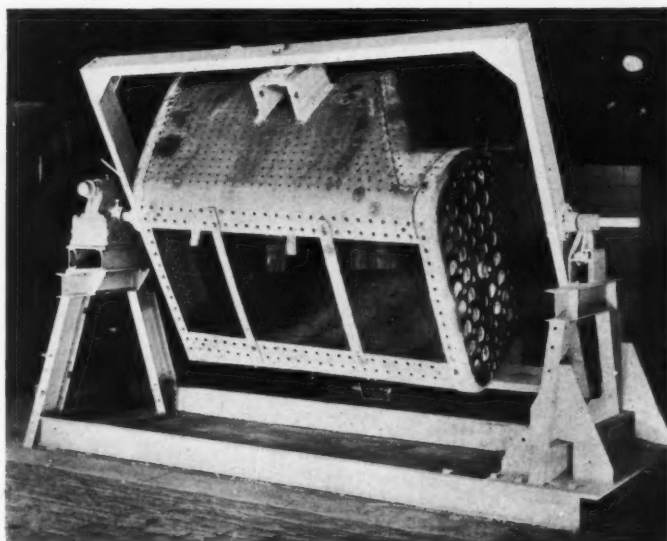
A number of cracks has occurred in the throat plate under the syphon necks, and in the side plates and door plates. Many of the cracks occur at or near the top of the fire where the heat may be very fierce and where scale may collect. The cracks may be due in part to these causes. The operation of pressing the openings in the throat plate for the syphon necks severely strains the plates, and some buckling in the radius is unavoidable; the cracks in the throat plate are attributed in part to this cause. The practice now being followed is to cut out two openings in the throat sheet and weld in a separate diaphragm for each of the syphon holes. This method should remove

and make these stays as flexible as possible, they are spaced at $3\frac{1}{4}$ -in. centres; the diameter was $\frac{5}{8}$ in. in the body and $\frac{3}{4}$ in. over the screwed ends. The water legs were widened and the increased length was expected to reduce breakage. The results as to leakage have been extremely good, and when the firebox is kept really clean it is practically free from leakage.

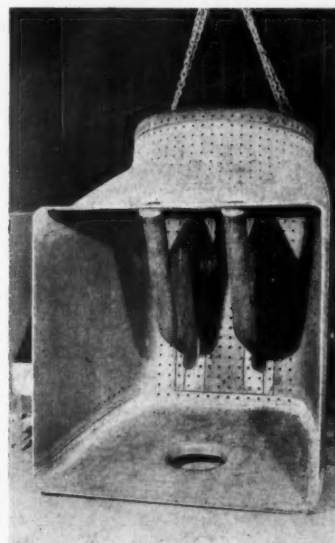
Cold-drawn tubes to standard specifications are used. The method of fastening is shown in Fig. 3. In the first boilers $\frac{1}{2}$ -in. copper ferrules were used between tubes and tube plates (U.S.A. practice). These proved unnecessary and have been discarded. The tubes are expanded into the tube plate and beaded. A sealing weld is made round each tube on the firebox plate.



Construction of Nicholson syphon



Manipulator for welding operations



View of inner firebox

any fear of cracking through undue stressing of the throat sheet.

The cracks are also ascribed to corrosion fatigue and this is no doubt a contributory cause. It will be considered later when dealing with the firebox stays. A large proportion of the cracks are surface cracks only. Such cracks as have occurred have caused no anxiety and are welded readily in situ, though specially trained and selected welders alone are allowed to do this work.

These fireboxes have now been in service five years and no plate, or part of a plate, has had to be renewed. There has been no trouble at all with any weld in the fireboxes; in fact, they have not been touched since the boilers were put into service.

The repairs to the syphons have only necessitated the welding near the top flange of one small surface crack, the rewelding of the sealing weld at the neck in a few cases, and rewelding a number of cracks, mostly surface cracks about the necks.

Steel stays were used throughout. Flexible stays (Fig. 2) were used only round the syphon necks. To keep down the diameter

The results exceeded all expectations. The tubes of the first ten engines were renewed, after an average mileage of 130,000, whilst in the workshops for repairs. They were fit to run a further mileage had it not been thought desirable to replace them during general repairs so as to ensure that they would require no attention before the engines came in for the next general repair. The fastening of the tube to the tubeplate has justified itself, the tubes remaining completely tight, again, something not previously experienced.

To minimise the direct admission of cold air into the firebox, to protect the syphons and firebox plates from sudden changes of temperature, automatic steam-operated fire-doors are fitted. The door is opened by a treadle depressed by the fireman's foot. In the fabricated smokebox (Fig. 4) corrugated steam pipes are used. The plain pipes first tried were very rigid and the cylinder steam inlet flanges cracked and even broke, due to expansion stresses. The two steam pipes from the header are 7 in. dia. and are continued down to the steam inlets of the

outer cylinders at the same diameter. The middle cylinder is fed by two 6-in. pipes branched off the outer 7-in. pipes, each feeding one end.

The blast pipe arrangement is shown in Fig. 4. The exhaust steam discharges through the five nozzles of the blast pipe top, the nozzles being $2\frac{1}{2}$ in. diameter, and passes to the atmosphere through the single chimney, which is 2 ft. 1 in. dia. at the choke.

(To be continued)

B.O.A.C. SPECIAL TRAIN.—Every day at 7.8 p.m. a pseudo-secret special train leaves a private siding at Victoria Station. Known as the "Airways Special," this train of Pullman cars carries some 120 passengers nightly, bound for all parts of the world. It leaves from a platform adjoining Airways Terminal and conveys passengers to Hurn Airport, near Bourne-mouth, or to the flying boat base at Poole. More than 30,000 passengers have travelled on the train during the past three and three-quarters years.

London Transport Track Conversion Rapid replacement by night shifts at Morden Station



*Work in progress during the night illuminated by
Tilley floodlight projectors*

LONDON TRANSPORT recently carried out a conversion from concrete to ballast track in two of the platform roads at Morden Station on the Northern Line. The roads were of the concrete pit type, with longitudinal timbers carrying the chairs and rails. These timbers had decayed and renewal work was required. This form of construction for open portions of the line is expensive to maintain, and as the pits were no longer required, it was decided to convert to ballasted sleeper track.

As Morden Station is one of the most heavily worked terminal stations of the London Transport system, possession periods had to be reduced to a minimum. Four 60-h.p. electrically-driven compressors were placed on the adjoining platform, and four air lines of a total length of 840 ft. were laid. Work commenced after the close of traffic at 12 p.m. on a Saturday night. All through the night, and until late Sunday afternoon, permanent-way gangs of some 40 men were engaged in removing the track and breaking out the concrete from the timber, and across the full width between platform walls for a length of 210 ft. The concrete was particularly hard, and 16 large pneumatic hammers were working continuously.



Work in progress during the day



General view of Morden Station, showing one of the roads after completion of the work

During the night ballast trains were worked in, and limestone ballast, sleepers, and rails for the new work were off-loaded. In the latter half of the Sunday day-time shift the gangs installed the sleeper track, ballasted it, reinstated the current rails, loaded up the old material, and left the track and platforms ready for service in the morning. This process was repeated in the following week-end, when a second platform was dealt with in a similar manner. The work at night time necessitated good lighting. Powerful bulbs were fitted in the available lighting standards on the platform, but this in itself was insufficient, and use was made of Tilley floodlight projectors, of which twelve were used during the night shifts.

GAS-TURBINE LOCOMOTIVE FOR S.N.C.F.
—The gas-turbine locomotive built by Brown, Boveri & Company, of Baden (Switzerland), and owned by the Swiss Federal Railways, has been loaned to the S.N.C.F. (French National Railways) for experimental purposes. It has been put in service on the Basle—Strasbourg main line, where it hauls expresses weighing up to 600 tonnes.



Beyer-Garratt locomotives at Badarpur Running Shed ready for service on a difficult mountainous section



On the plain section of the B. A. R. A Beyer-Garratt locomotive with a mineral train of nearly 500 tons between Bhanngash and Rashipur



The highest station on the hill section of the Bengal Assam Railway. Mixed trains crossing at Jatunga Station

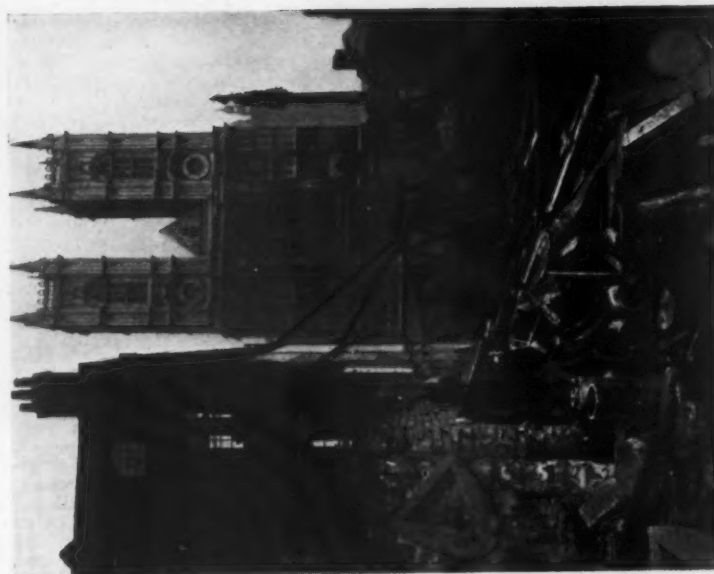
Modern Locomotive Power in Assam

IN 1943 two types of metre-gauge war-standard Beyer-Garratt locomotives were supplied in record time for the Burma operation; they were fully described in our August 25, 1944, issue. These special purpose locomotives were allocated temporarily to the Bengal Assam Railway when the Japanese were making a supreme effort to cut this communication with northern Burma.

The 2-8-0 + 0-8-2 type was heavily engaged in the haulage of petrol and stone trains between Akhaura and Badarpur. Despite the difficulties of this section and the restrictions of passing loops, heavy loads were hauled with an economy of over 40 per cent. in coal consumption, as compared with the standard class of engine previously used. The 2-8-2 + 2-8-2 type was continuously engaged on the section between Badarpur and Lumding, the most difficult section of the whole railway. This passage through mountainous country is made over long grades of 1 in 60 with 11 miles of practically continuous 1 in 37 with curvature of 13 deg. uncompensated. The previous engines on this section hauled a load of 230 tons, but military requirements made it imperative that this should be substantially increased. The Beyer-Garratt locomotives hauled loads up to 500 tons over this section, at the same time showing an economy of 60 per cent. in coal consumption per 1,000 gross ton miles.

It is reported that the locomotives proved mechanically reliable in every way; engine maintenance was reduced and foot-plate staff welcomed them as power units which would stand heavy punishment without failure. The railway has stated that without these engines it would have been unable to handle the tremendous traffic which contributed to the success of the 14th Army.

Building the Inner Circle Railway—5 1867-1870



Clearing the site, opposite Broad Sanctuary, for the construction of the District Railway, at the eastern end of Tothill Street, Westminster

Several important street improvements were made by the District Railway in connection with the construction of this section of line. The southern termination of Exhibition Road, by South Kensington Station, was laid out by the District Railway, and Tothill Street was widened to its present width



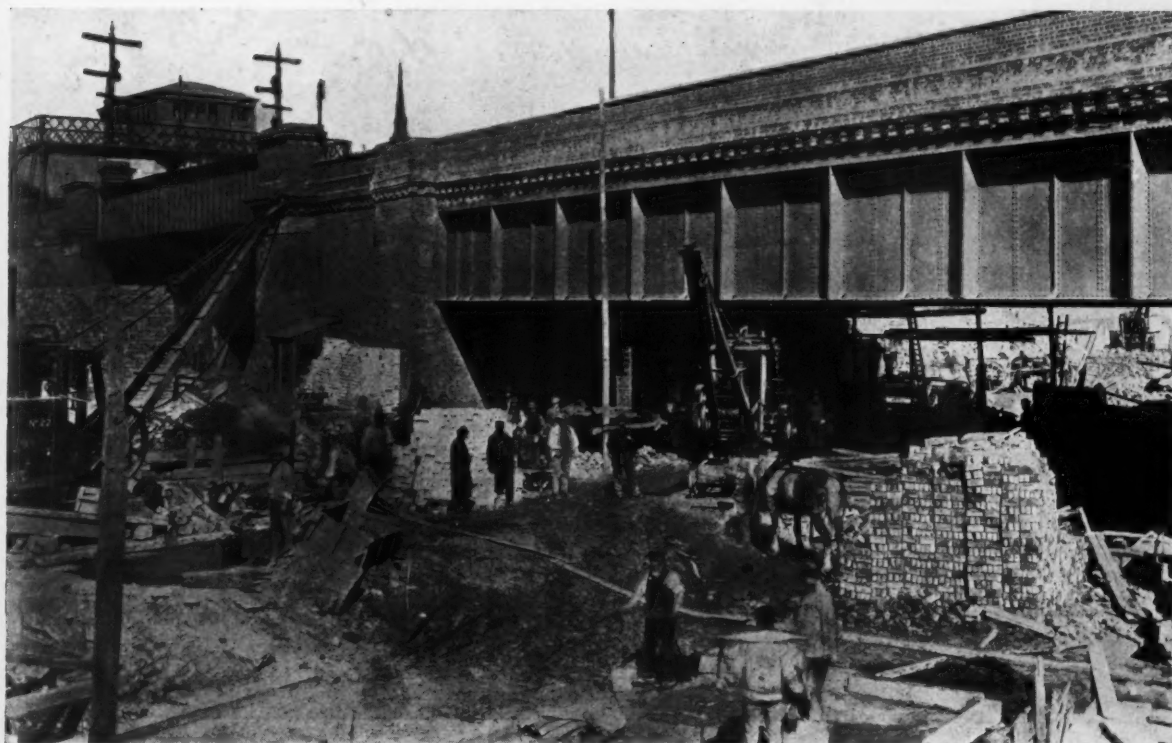
Excavations for the District Railway across Parliament Square alongside the Canning Statue. The lower part of Big Ben Tower may be seen to the right of Westminster Bridge approach



Completing the cut and cover form of construction over the Metropolitan Railway near South Kensington Station; the low building in the left background is Pelham House



Building the District Railway in front of Somerset House in 1869. Victoria Embankment was opened on July 13, 1870; the railway from Westminster to Blackfriars on May 30, 1870



The District Railway under construction under the London, Chatham & Dover Railway near what is now New Bridge Street, Blackfriars. The L.C. & D.R. signals and box may be seen in the upper left-hand corner of the picture



Site clearance in the neighbourhood of Queen Victoria Street immediately to the east of New Bridge Street, Blackfriars. Queen Victoria Street was built simultaneously with the construction of the District Railway. The thoroughfare was opened in sections between October, 1869, and November, 1871. The railway was opened from Blackfriars to Mansion House on July 3, 1871



Building the District Railway on the west side of Blackfriars Bridge (of course, many years before its widening) in 1870. The old bridge (built in 1760-1769) was demolished in 1864, and the present one, begun in July, 1865, was opened in November, 1869. The railway was opened from Westminster to Blackfriars on May 30, 1870

RAILWAY NEWS SECTION

PERSONAL

G.W.R. APPOINTMENTS

The Great Western Railway has appointed, in South Wales, Resident Assistants to the Superintendent of the Line and the Chief Goods Manager, respectively, responsible for dealing on the spot with the many important post-war problems connected with passenger, mineral and freight traffics. The two officers selected to fill these posts are Mr. Herbert H. Phillips, A.C.I.S., M.Inst.T., Divisional Superintendent, Cardiff, and Mr. R. A. Ryan, Operating Assistant to the Chief Goods Manager, Paddington. Their offices will be in Cardiff.

The G.W.R. also announces the following appointments:—

Mr. H. H. Swift, Divisional Superintendent, Chester, to be Divisional Superintendent, Cardiff.

Mr. N. H. Briant, Assistant Divisional Superintendent, Chester, to be Divisional Superintendent, Chester.

Mr. E. V. Swallow, Dock Manager, Barry Docks, to be Dock Manager, Swansea Docks, on retirement of Mr. H. W. Morgan on December 31.

Mr. T. Carpenter, Dock Manager, Port Talbot Docks, to be Dock Manager, Barry Docks.

Mr. R. H. Rice, Manager, Inland Sorting Depot, St. Mellons, to be Dock Manager, Port Talbot Docks.

Mr. G. Weaver, Assistant Goods Agent, Birmingham, to be Goods Agent, Newport.

SOUTH AFRICAN RAILWAYS & HARBOURS

The following appointments have been announced:—

Mr. S. M. Mulligan, Superintendent (Operating), Johannesburg, to be System Manager, Johannesburg.

Mr. D. J. J. du Plessis, System Manager, Bloemfontein, to be System Manager, Pretoria.

Mr. J. P. Laurens, System Manager, Port Elizabeth, to be Chief Superintendent (Staff), Headquarters.

Mr. H. R. Moffat, Assistant Chief Technical Officer (Reconstruction), to be Chief Technical Officer (Reconstruction).

Mr. H. Birrell, System Engineer, Johannesburg, to be Chief Planning Officer.

Mr. A. T. Hubbard, Superintendent (Rates), Headquarters, to be Chief Superintendent (Commercial), Headquarters.

Mr. G. J. Joubert, Disciplinary Appeals Surveyor & Legal Officer, Headquarters, to be Chairman, Disciplinary Appeals Board.

Mr. J. M. Southey, Inspecting Engineer (New Works), to be Assistant Chief Technical Officer (Reconstruction).

Mr. H. A. Gregorowski, System Manager, Windhoek, to be System Manager, Bloemfontein.

Mr. H. V. Taylor, Superintendent (Operating Research), to be System Manager, Port Elizabeth.

Two positions of Relief System Manager have been created, and the appointments to these posts are: Mr. F. M. Williams, previously Superintendent (Operating), Cape Town, and Mr. G. W. Reid, previously Assistant Manager (Commercial), Road Motor Services.

Mr. D. P. McDonald, Superintendent (Operating), Pretoria, to be System Manager, Windhoek.

Mr. H. J. C. Bosman, Superintendent (Commercial & Staff), Johannesburg, to be Assistant Manager (Commercial), Road Motor Services, Headquarters.

Mr. George Stephens, who, as recorded in our November 30 issue, is retiring on December 31 from the position of Chief of Police, Great Western Railway, began



Mr. George Stephens
Chief of Police, G.W.R., 1935-45

his railway career in the Traffic Department in 1897, and transferred to the Detective Department, as it then was, in 1905. After a period as District Detective Officer at Cardiff he transferred to headquarters and in 1912 became Assistant Superintendent. After the war of 1914-18, when the force was reorganised, he became Assistant Chief of Police. In 1935 he became Chief of Police, and from 1939 to 1943 was Chairman of the Police Subcommittee of the Railway Executive Committee. During the recent war, in addition to the responsibility of policing the railway and docks, he was A.R.P. Officer for the Paddington area. Throughout his long police career Mr. Stephens has been an associate and friend of leading



Mr. J. McNeil
District Superintendent, Glasgow,
L.N.E.R., 1942-45

police officers all over Great Britain, and his wide knowledge of railway and police matters did much to increase the efficiency and to enhance the prestige of his department.

It is announced in the Fifth Supplement to *The London Gazette*, dated October 19, that the King has awarded the Imperial Service Medal to 28 employees of the Department of Railways, and 13 employees of the Department of Road Transport & Tramways, New South Wales. In the Fifth Supplement to *The London Gazette*, dated November 16, the awards are announced of the Imperial Service Medal to seven employees of New South Wales Department of Road Transport & Tramways.

Mr. J. McNeil, who, as recorded in our November 2 issue, has retired from the position of District Superintendent, Glasgow, L.N.E.R., started his railway career with the North British Railway at Drumchapel Station in 1895, and, after occupying various clerical positions, was appointed a relief stationmaster in 1906. In 1914 he was appointed Stationmaster at Mallaig, and he was promoted to be Stationmaster at Aberdeen in 1918, and to Dundee in 1929. On March 1, 1932, he was appointed Assistant District Superintendent, Glasgow, and he occupied that position until appointed District Superintendent on February 1, 1942. Shortly after the outbreak of war, on account of the damage to the East Coast ports by enemy action, the general flow of military traffic and personnel was diverted to the West Coast ports, and, as a result, Mr. McNeil was appointed a member of the Glasgow Port Emergency Committee; he was also Chairman of the Bo'ness Port Emergency Committee. Mr. McNeil was recently entertained at the North British Hotel, Edinburgh, by the chief and district officers of the L.N.E.R. Scottish Area, including:—

T. F. Cameron, Divisional General Manager; R. Gardiner, Superintendent; E. W. Arkle, Goods Manager; L. E. Marr, Passenger Manager; E. D. Trask, Locomotive Running Superintendent; W. Y. Sandeman, Engineer; G. Johnston, District Superintendent, Edinburgh; H. Angus, District Goods & Passenger Manager, Edinburgh; J. Lorimer, District Goods & Passenger Manager, Dundee.

About 200 members of the L.N.E.R. staff, representing all grades, attended a further function in the L.N.E.R. staff canteen, Buchanan Street, Glasgow, to bid Mr. McNeil farewell and assure him of their good wishes in his retirement.

Mr. R. D. Roberts, District Goods & Passenger Manager, Chester, L.M.S.R., who, as recorded in our December 14 issue, is retiring at the end of the year, is the youngest son of the late Mr. Owen Roberts, J.P., and Mrs. Roberts, Holyhead. He is a brother of Mr. O. Glynne Roberts, who retired at the end of 1940 from the positions of Secretary of the London Midland & Scottish Railway Company and Assistant to the President, and of the late Captain Ivor Roberts, who retired in 1934 from the position of Marine Superintendent & Harbourmaster, Holyhead, L.M.S.R., and who died in 1944. Mr. R. D. Roberts commenced his career in the service of the former L.N.W.R. at Holyhead, and was appointed Irish Traffic Manager at Dublin



Mr. R. D. Roberts

District Goods & Passenger Manager,
Chester, L.M.S.R., 1940-45

in 1928. He was transferred to Swansea as District Traffic Superintendent in 1929. In 1934 Mr. Roberts was appointed Dock Superintendent at Garston Docks, and he was appointed District Goods & Passenger Manager, Chester, in June, 1940.

Mr. F. H. Fisher, District Goods & Passenger Manager, Swansea, L.M.S.R., who, as recorded in our December 14 issue, has been appointed District Traffic Manager, Chester, joined the former L.N.W.R. in 1912 as a probationer, and, after gaining experience in the Commercial and Operating Departments at Bletchley and Bedford, joined the staff of the District Goods Manager, Northampton. He saw service during the war from 1915 to 1919 in France with the Royal Engineers, and subsequently was gazetted Major in charge of a Supplementary Reserve unit. On return from France he became Outdoor Assistant to the Superintendent of the Line at Birmingham &



Mr. F. H. Fisher

Appointed District Traffic Manager,
Chester, L.M.S.R.

Chester. In 1925 he was appointed Assistant District Controller at Rugby, and two years later at Nuneaton. He became District Controller, Stoke, in 1929, and District Controller, Chester, in the same year. Mr. Fisher was appointed Divisional Controller (Passenger Services), Crewe, in 1934, and Divisional Controller (Freight Services), Crewe, in 1939. He was appointed District Goods & Passenger Manager, Swansea, in April, 1943. His new position of District Traffic Manager, Chester, embraces both commercial and operating responsibilities, superseding the present District Goods & Passenger Manager and District Controller, Chester.

Mr. F. H. Eggleshaw, M.B.E., who, as recorded in our November 30 issue, has retired from the position of Locomotive Works Manager, Doncaster, L.N.E.R., has spent all his working life at Doncaster. He commenced as a premium apprentice under Mr. Patrick Stirling, Locomotive Engineer,



Mr. F. H. Eggleshaw

Locomotive Works Manager, Doncaster,
L.N.E.R., 1923-45

Great Northern Railway, in 1894, and entered the locomotive drawing office in 1899. He joined the Outside Machinery & Hydraulic Department in 1901, and was taken on the Locomotive Works Manager's staff as Assistant Engineer in 1908. Mr. Eggleshaw was made Assistant Works Manager in 1919, and was appointed Locomotive Works Manager in May, 1923, which post he has held until his recent retirement. He was made M.B.E. for work in the war of 1914-18. Mr. Eggleshaw saw the last type of the Stirling "eight-footers" placed in service. So far as building at Doncaster was concerned, he saw all the Ivatt locomotives go through the shops, and had a considerable amount of work to do with the Gresley engines. Under Mr. E. Thompson now Chief Mechanical Engineer, L.N.E.R., ex-G.C.R. 0-8-0 tender engines were rebuilt into tank engines, and 2-8-2 engines were converted into 4-6-2s; the first Pacific, No. 4470, was rebuilt with separate valve gear to each cylinder; an engine of the "K3"



Mr. J. N. Bull

Appointed Works Manager, Cowlares,
L.N.E.R.



Mr. James Boot

Chief Engineer, Metropolitan-
Vickers GRS. Limited, 1930-45



Mr. J. C. Kubale

Appointed Chief Engineer, Metropolitan-
Vickers GRS. Limited

type was rebuilt with two cylinders and one of the "K4" type was taken in hand for a similar alteration. Mr. Eggleshaw also had a good deal to do with the new tank engine No. 9000.

Mr. J. N. Bull, B.A., A.M.I.Mech.E., Assistant Works Manager, Doncaster (Plant), Locomotive Works, L.N.E.R., who, as recorded in our November 30 issue, has been appointed Works Manager, Cowlairs Locomotive, Carriage & Wagon Works, was born on November 21, 1904, and was educated at Oundle School and St. Catharine's College, Cambridge. He became a pupil of Sir Nigel Gresley in 1926. He was appointed Inspector, Heaton Running Shed, Newcastle, in 1929, and Shedmaster, Northallerton, in 1933. Mr. Bull received special training in operating and goods and passenger commercial in the Darlington district in 1937, and then was Stationmaster, & Locomotive Shed Foreman, Alnmouth. He became Shedmaster, Darlington Bank Top, in 1940, and was Assistant to Works Manager, York Carriage & Wagon Works, 1940-41. Mr. Bull became Works Manager, Doncaster Carriage & Wagon Works in 1941, and, later in the same year, Assistant to Chief Mechanical Engineer on war work. In 1942 he was appointed Assistant Mechanical Engineer (Outdoor), and in 1943 to the position he now vacates on his new appointment.

Mr. James Boot, M.I.R.S.E., who, as recorded in our November 23 issue, has retired from the position of Chief Engineer, Metropolitan-Vickers-GRS. Limited, was born in December, 1881, and entered the Telegraph Department of the Great Northern Railway in 1896; he was associated with the construction of equipment for some of the earliest practical examples of track circuiting on this railway near Kings Cross. In 1905 he joined W. R. Sykes Interlocking Signal Co. Ltd., and had much to do with the electro-mechanical signalling apparatus adopted for the enlargement of Victoria Station and the approach thereto, London Brighton & South Coast Railway. He was made Electrical Engineer to the company and acted as personal assistant to the late Mr. W. R. Sykes, junior. In 1910 Mr. Boot went to Siemens Bros. & Co. Ltd. as Commercial Assistant for the sale of electrical equipment to railway companies. In 1915 he was transferred to the cable-laying vessel *Faraday* and saw service in the Atlantic. On returning home he became Technical Assistant to the late Mr. A. H. Johnson, then Signal & Telegraph Superintendent, London & South Western Railway, and one of the foundation members of the Institution of Railway Signal Engineers. On Mr. Johnson's death in 1921 Mr. Boot became Chief Assistant to his successor, the late Mr. W. J. Thorrowgood. He rejoined Siemens Bros. & Co. Ltd. in 1925, and not long afterwards was appointed Chief Engineer of Siemens & General Electric Railway Signal Co. Ltd. He resigned in 1930 to become Chief Engineer of Metropolitan-Vickers-GRS. Limited. Mr. Boot has been associated with numerous extensive signalling installations, at home and overseas. He was elected a Member of Council of the Institution of Railway Signal Engineers in 1921, and was President of the Institution from February, 1939, until 1944.

Mr. J. C. Kubale, M.B.E., A.M.I.Mech.E., A.M.I.E.E., M.I.R.S.E., who, as recorded in our November 23 issue, has been appointed Chief Engineer, Metropolitan-Vickers-GRS. Limited, was educated at

Melbourne Technical College and received his early training on the Victorian Government Railways, in the Signal & Telegraph Department. From 1925 to 1928 he studied in the U.S.A. with the General Electric Company of Schenectady, the General Railway Signal Company of Rochester, and various American railways. He then returned to the Victorian Government Railways, where he became an Assistant Engineer on electric traction work in the Chief Electrical Engineer's Department. He joined Metropolitan-Vickers-GRS. Limited in 1930. Mr. Kubale has recently been released from H.M. Forces, in which he held a commission as Major in the Royal Engineers, and in which he served abroad for over four years in the Middle East and Italy. He was made an M.B.E. in October, 1943, for service in connection with the Western Desert campaign.

We regret to record the death on December 14, in his 74th year, of Sir Albert James Bennett, Bt., Chairman of Ransome & Marles Bearing Co. Ltd.

Mr. E. S. Little has been appointed Secretary of the British Thomson-Houston Co. Ltd. Mr. Little, who is a Director of the company, will combine the duties of Secretary with his existing duties as Comptroller.

We regret to record the death on December 13, in his 85th year, of Mr. John Taylor, C.B.E., formerly Vice-Chairman of Mather & Platt Limited and a Vice-Chairman of the British Electrical & Allied Manufacturers' Association.

Mr. W. H. Peters, F.R.I.C., is retiring from the position of Chairman of Docker Brothers on December 31. Mr. Peters went to Birmingham 37 years ago as Technical Adviser to Mr. Dudley Docker. In 1921 he was made Technical Director of Docker Brothers, and in May, 1940, Chairman. Mr. C. A. F. Hastilow, B.Com., M.Sc., F.R.I.C., succeeds Mr. Peters as Chairman of Docker Brothers, with which company he has been since 1920.

The appointment is announced of Mr. G. Hyna as General Manager, Canadian Pacific Railway Agency (Belgium) S.A., Antwerp. Mr. Hyna entered C.P.R. service in 1913 at Antwerp. In 1921 he was transferred to the Warsaw Office, and in 1928 was appointed Agent for Poland. He was at Warsaw at the outbreak of war; he left there on the evening of September 1, 1939, and made his way by a circuitous route to England, a journey which took him twenty days.

Mr. S. A. Finnis, W.I., as recorded in our November 30 issue, in his absence with H.M. Forces was appointed District Superintendent, Sunderland, L.N.E.R., and who has returned to the company's service and taken up the duties of that position, joined the L.N.E.R. in 1927. After training as a traffic apprentice, he was appointed Assistant to Goods Agent, Hull, in 1931, and Assistant to District Goods & Dock Manager, West Hartlepool, in 1933. He became Dock Superintendent, Tyne Dock, in 1936, and Head of Traffic Section, Divisional General Manager's Office, York, in the next year. He was made Assistant District Superintendent, Sunderland, in 1939. Mr. Finnis was called up with the Supplementary Reserve on September 1 of that year. He went to France as Adjutant, No. 1 Rail-

way Operating Group, R.E., and, after the fall of France, to the Middle East as Dock Superintendent, Port Said. He later became Dock Superintendent, Alexandria, and then D.A.Q.M.G. (Movements & Transportation), Tobruk. He was taken prisoner at the fall of Tobruk, and spent nearly three years in prisoner-of-war camps in Italy and Germany. He was released in April, 1945. Mr. Finnis was appointed to his present post, which he recently returned to take up, on January 1, 1945, while he was still a prisoner of war.

INDIAN RAILWAY STAFF CHANGES

Mr. H. G. Salmond, C.I.E., Chief Government Inspector of Railways, has been permitted to retire from the service.

Mr. Dev Datt has been confirmed as Chief Government Inspector of Railways.

Mr. F. J. de Souza and Mr. K. L. Ganguly have been confirmed as Government Inspectors of Railways.

Mr. W. S. Benton, on return from leave, has resumed charge of his duties as Director, Civil Engineering, Railway Board.

Mr. N. S. Sen has been confirmed as Director, Traffic, Railway Board.

Colonel H. W. Wagstaff, C.S.I., M.C., on return from leave, has resumed charge of his duties as Member, Staff, Railway Board.

Mr. B. B. Varma, O.B.E., has been appointed to officiate as Director, Establishment II, Railway Board.

The services of Mr. Ram Gopal, C.I.E., officiating Director, Finance II, Railway Board, have been placed at the disposal of the Auditor-General of India.

Rai Bahadur N. C. Ghosh has been confirmed as General Manager, E.I.R.

Mr. S. G. Pick has been confirmed permanently as Chief Traffic Manager, B.B.C.I.R.

Mr. J. E. Heining has been confirmed permanently as Chief Engineer, N.W.R.

Mr. D. H. Hambly has been confirmed permanently as Deputy General Manager (Works), N.W.R.

Mr. W. F. Hervey has been confirmed permanently as Deputy Traffic Manager (General), G.I.P.R.

Mr. S. J. P. Cambridge, O.B.E., formerly Officiating Deputy Director-General of Railways, Calcutta, has been appointed to officiate as Deputy General Manager (Food & Planning), B.N.R.

Lt. Colonel L. D. J. Turnbull has been appointed to officiate as Deputy General Manager (Road Transport), E.I.R.

Mr. K. P. Modwel, on return from leave, has been appointed to officiate as Deputy General Manager (Planning), E.I.R.

Mr. A. H. M. Campion, Officiating Deputy General Manager (Works & Stores), B.B.C.I.R., has been granted 20½ months' leave preparatory to retirement as from May 20.

Mr. F. G. S. Martin, Controller of Stores, E.I.R., has been granted two years' leave preparatory to retirement as from August 26.

Mr. E. H. N. Lowther, Divisional Superintendent, Lucknow, E.I.R., has been granted 22 months' leave preparatory to retirement as from April 7.

Mr. C. G. Graham, Chief Engineer, G.I.P.R., has been granted two years' leave preparatory to retirement as from March 28.

Mr. W. B. Burford, Deputy General Manager (Works), G.I.P.R., has been granted two years' leave preparatory to retirement as from April 9.

Parliamentary Notes

Manchester Ship Canal Bill

The Manchester Ship Canal Bill as amended was read the third time and passed in the House of Lords on December 5.

Questions in Parliament

Government-Owned Railways

Sir Patrick Hannon (Birmingham, Moseley—C.) on December 10 asked the Under-Secretary of State for Dominion Affairs if, in view of the contemplated acquisition of the railways of Great Britain and Northern Ireland by the State, he would inquire of the Governments of Canada and Australia as to the results of the State management of railways in those Dominions previous to the outbreak of war and lay the replies before the House.

Mr. J. Parker (Under-Secretary of State for Dominion Affairs): Detailed information as to the working of Government-owned railways in the Dominions is contained in official publications issued by the respective Governments, and the Secretary of State sees no reason for any special inquiry.

Sir P. Hannon: Would not the Under-Secretary think it desirable, in view of the statement made in respect of the nationalisation of transport in this country, that further inquiries should be made into the circumstances in which these projects were a complete failure?

Mr. Parker: I cannot accept the view that they were a complete failure. Sir P. Hannon will find that most of the Dominions have very successfully operated Government railway undertakings.

Mr. A. C. Bossom (Maidstone—C.): May I suggest that the Minister should put the whole of these reports in the Library so that we can have a look at them?

Mr. Parker: If there is any demand for that, we will be pleased to consider it.

Commander A. Marsden (Chertsey—C.): Will the Minister simultaneously study the services and financial results of those railways run by private enterprise?

Mr. Parker did not reply.

Glasgow-Lesmahagow and Coalburn Passenger Services

Mr. T. Steele (Lanark—Lab.) on December 4 asked the Minister of War Transport if he would state the number of passengers carried a day on the Glasgow-Lesmahagow and Coalburn route during the week ended September 1, 1945, and the corresponding week in 1939.

Mr. Alfred Barnes (Minister of War Transport) in a written answer gave the following figures:—

	1945	1939
	Week ended	Week ended
	September 1	September 2
Sunday	6,835	6,108
Monday	12,338	8,334
Tuesday	12,036	7,854
Wednesday	11,466	8,340
Thursday	11,786	8,276
Friday	12,524	9,819
Saturday	13,632	10,821
	80,617	59,552

The percentage increase on the Coalburn service was 35.4, compared with an overall increase of 38.1 on all the (London Midland & Scottish Railway) company's services in the Larkhall area.

L.N.E.R. Services

Sir Stanley Holmes (Harwich—Lib. Nat.) on December 6 asked the Minister of War Transport whether he would call on the L.N.E.R. to see that the trains running between Clacton-on-Sea and Liverpool Street, and *vice versa*, ran to time, as the present unpunctuality was of the greatest inconvenience to those who travelled to London and back every day.

Mr. Alfred Barnes in a written answer stated: I am informed by the L.N.E.R. that the late running of these trains is mainly due to shortage of staff for maintenance and other duties at locomotive depots and to the heavy traffic on this line. Fog has recently caused further difficulties. Every effort is being made to ensure punctual working.

Acceleration of Railway Services

Mr. C. Osborne (Louth—C.) on December 11 asked the Minister of War Transport if he had any statement to make about the speeding-up of trains; and when did he expect expresses to run to their pre-war schedules.

Mr. Alfred Barnes in a written answer stated: A number of trains already has been accelerated, and others will be speeded up as practicable. This must be a gradual process, but it is the general aim to restore pre-war speeds before the end of the next year. Progress will depend on the return of experienced staff to railway service and/or the making good of the present heavy arrears of repairs and renewals.

Restriction of Movement of Goods

Mr. C. Osborne (Louth—C.) on December 14 asked the Minister of War Transport if he was aware that since November 13 there had been a ban on all goods from Peterborough to the south and the railways could not give any idea when it would be lifted; if he would give the reasons for the ban; and what steps he was taking to have it removed.

Mr. Alfred Barnes in a written answer stated: This restriction was imposed because the routes concerned were congested with loaded wagons. The restriction was removed on December 5.

Conditions at Temple Mills Railway Works

The Reverend R. W. Sorensen (Leyton West—Lab.) on December 4 asked the Minister of Labour & National Service if he had considered the complaints respecting bad working conditions at Temple Mills railway works and elsewhere, details of which had been sent to him; and what action was being taken to make those conditions more amenable.

Mr. G. A. Isaacs (Minister of Labour & National Service) in a written answer stated: Conditions in these workshops have been receiving the attention of H.M. Inspector of Factories. A number of improvements are to be made, including the repair of damage due to enemy action, but progress has been hampered by shortage of both labour and materials.

Cheap Day Fares on Railways

Mr. Edward Davies (Enfield—Lab.) on December 10 asked the Minister of War Transport when he intended to re-introduce the cheap day fares on the railways.

Mr. Alfred Barnes: I have come to the conclusion that traffic conditions at the moment do not permit of the restoration of cheap fares on the railways. I propose to review the matter in the near future.

Mr. Davies: Is the Minister aware that in the provinces many trains are running very lightly loaded, and that there, at least, it would be a convenience to the public if they could have cheap fares without injuring the traffic position generally?

Mr. Barnes: I am afraid that these arrangements could not be altered or applied according to the traffic which any particular route or train carries.

Mr. R. De la Bere (Evesham—C.): We want better and cheaper travel facilities.

Gravesend Railway Service

Mr. Garry Allighan (Gravesend—Lab.) on December 5 asked the Minister of War Transport if he would have the rail service

to Gravesend overhauled with a view to providing through trains in the peak hours, thus relieving the overcrowding caused by the Gravesend trains being used by passengers to Dartford, which was already served by fast trains running no further than that station.

Mr. Alfred Barnes in a written reply stated: Between London and Gravesend during peak hours there is one fast train less in each direction than before the war. The trains terminating at Dartford stop at all stations and are heavily loaded. If the fast trains to and from Gravesend did not stop at Dartford it would be a serious loss of facilities for Dartford passengers which could not be made good by the provision of new fast services between London and Dartford unless the slow services were correspondingly reduced. The Southern Railway hopes to be able to restore the full pre-war service next summer.

Transport Conditions in Europe

Major Niall Macpherson (Dumfries—Lib. Nat.) on December 4 asked the Secretary of State for War whether he was aware of the state of the trains used to convey British Service personnel across Europe to and from Udine; and, whether he would take steps to have windows repaired and heating systems put in order before the full rigours of winter began.

Mr. J. J. Lawson (Secretary of State for War) in a written answer stated: The stock used between the Channel ports and Milan is in good condition. Between Milan and Udine poorer stock must sometimes be used if the numbers travelling are to be maintained. Every effort is made to improve conditions and an alternative route is scheduled to open next month which will ease the situation.

Mr. S. Dye (Norfolk South West—Lab.) on December 4 asked the Secretary of State for War if he was aware of the bad conditions of transport for men of the C.M.F. coming on leave from and returning to Italy, as exemplified by the unsatisfactory conditions of transit camps, such as those at Tibenham, Norfolk, where troops were kept up to 14 days, and the overcrowding on the troopship *Johann de Witt* at Southampton; and if he would take steps to improve transport conditions.

Mr. J. J. Lawson stated in a written answer: I dealt with the incidents mentioned in my reply yesterday to a question by Mr. R. G. Rogers (North Kensington—Lab.). I cannot agree that conditions in general are bad. In order to provide for as many men as possible we make the fullest use of the limited transport facilities we have, by air, land and sea. There is necessarily a certain amount of overcrowding at times, but the majority of those who travel prefer this to a reduction in the amount of leave or repatriation, which is the only alternative. We are constantly working to improve the general standard.

Kenya Railway Staff

The Reverend R. W. Sorensen (Leyton West—Lab.) on December 5 asked the Secretary of State for the Colonies whether he was considering the abolition of the heavy fines that are now being imposed on the railway running staff in Kenya; if he was aware of considerable discontent respecting this practice; and why overseas leave was not being granted to members of the running staff after many years of service.

Mr. George Hall (Secretary of State for the Colonies): The High Commissioner for Transport has reported that heavy fines are only imposed for offences which endanger the safe operation of the railway and that they are considered preferable to reduction in grade or dismissal of the offenders. I have not received any reports

of discontent respecting this practice. With regard to the last part of the question, it has unfortunately proved impossible to grant overseas leave on any considerable scale on account of the continued pressure of military traffic, and more recently of demobilisation. The Railway Administration will, of course, keep this matter under close review, so as to revert to the normal practice as soon as this is possible.

The Reverend R. W. Sorensen: Is the Minister aware that meanwhile some of these men have been without leave for upwards of seven and eight years?

Mr. Hall: That is so, but there has been a very good lift. During November nearly 600 persons were brought from East Africa.

Railway Strike in Northern Rhodesia

Mr. D. N. Pritt (Hammersmith North—Ind. Lab.) on December 5 asked the Secretary of State for the Colonies whether he had any statement to make on the recent strike by railway employees in Northern Rhodesia; why the General Manager of the railways had informed the press that the men had struck without previously approaching him, although he had been approached in writing six times; and what action had been or would be made to meet the demands of the employees.

Mr. George Hall: The recent strike in Northern Rhodesia of African employees of Rhodesia Railways lasted from October 27 to November 6. As concerns the second part of the question, the General Manager is not a Government official, but the servant of the railway company, and I have no information concerning any statement made by him to the press. As regards the last part of the question, I am not at present in a position to make a statement, as a commission appointed by the Governor is examining the grievances of the African employees.

Channel Tunnel

Lt.-Commander C. N. Shawcross (Widnes—Lab.) on December 5 asked the Minister of War Transport whether all security objections to a Channel Tunnel had now been removed; and if he would consider plans to construct a tunnel for road and rail traffic as soon as labour and materials were available.

Mr. Alfred Barnes stated in a written answer: Apart from any other considerations, including the development of civil aviation, I think that there are many urgent problems of improvement and development of transport in this country to which priority would have to be given before we consider this particular and inevitably costly project.

Travel Restrictions between Great Britain and Northern Ireland

Dr. James Little (Down—C.) on December 13 asked the Secretary of State for the Home Department whether, at and from January 1, 1946, he would remove all restrictions on travel between Great Britain and Northern Ireland.

Mr. Chuter Ede (Home Secretary) wrote in reply: No.

Fishguard-Rosslare Service

Lord Templemore in the House of Lords on December 12 asked the question standing in his name, which was as follows: To ask His Majesty's Government whether the steamer route to Ireland via Fishguard and Rosslare had yet been re-opened; and if not when that service might be expected to be resumed.

Lord Walkden: My Lords, I regret that I am not yet in a position to say when it will be possible to make a suitable ship available for this service.

Lord Templemore: My Lords, as Lord Walkden and the Minister of War Transport (Mr. Alfred Barnes) are aware, this steam-

ship service is the only one which formerly plied between Great Britain and Eire which has not been either restored or in a great measure improved. Do they realise that the absence of this service causes great inconvenience to traders and those who wish to proceed from the south of England to the southern part of Eire?

Lord Walkden: My Lords, I am aware of the facts and I have especially impressed them on the Minister of War Transport, but he informs me that of the little vessels that operated this service before the war the *St. Andrew* is the only one now in existence and that she is fully occupied in bringing troops from the Continent to England and cannot be spared at present through the need for moving as many troops as possible. We are exceedingly sorry that that is the position, but, as soon as something can be done to meet the wishes of our Southern Ireland friends, that certainly will be done.

Last Trains from Westminster Underground Station

Mr. E. H. Keeling (Twickenham—C.) on December 10 asked the Minister of War Transport what time the last trains left Westminster Station; and whether any later trains were proposed.

Mr. Alfred Barnes in a written answer stated: The times of the last trains from Westminster Station are as follow:—

Destination	Weekdays	Sundays
Eastbound		
Inner Circle (via Aldgate)	11.43 p.m.	11.40 p.m.
Upminster	11.40 p.m.	11.9 p.m.
Dagenham	11.53 p.m.	11.42 p.m.
Westbound		
Inner Circle (to Baker Street)	12.5 a.m.	11.48 p.m.
Wimbledon	12.9 a.m. (E)	11.55 p.m. (E)
Richmond	11.40 p.m.	11.14 p.m.
Ealing Broadway	12.9 a.m.	11.55 p.m.

(E) Change at Earl's Court

No later trains are proposed at present.

Proposed Pier at Portnaguran

Mr. Malcolm MacMillan (Western Isles—Lab.) on December 4 asked the Secretary of State for Scotland whether the pre-war offer by the Department of Agriculture to the Ross-shire County Council of a 75 per cent. grant towards construction of the proposed pier at Portnaguran, Isle of Lewis, was now available, or would be renewed at the earliest date, in view of the importance of this project to the restoration of the island's fishing industry.

Mr. T. Fraser (Joint Under-Secretary of State for Scotland): The pre-war offer was for a grant of 75 per cent. of the cost of the construction of a harbour at Portnaguran subject to a maximum of £10,500. As a similar harbour now would cost a very much larger sum a renewal of the former offer would not meet the case. The possibility of revising the plan with a view to reducing costs is being examined.

Dockworkers' Wages

Mr. D. G. Logan (Liverpool, Scotland—Lab.) on December 4 asked the Minister of Labour if he was now able to report the result of negotiations in respect of the dockers' demands.

Mr. G. A. Isaacs stated in a written answer: Since my statement of November 27 last the National Dock Delegate Conference of the unions concerned has decided to recommend for acceptance the pieceworkers' formula and the other arrangements tentatively agreed on the negotiating committee of the National Joint Council for the Port Transport Industry. The committee of investigation also has now been appointed, and is sitting at this moment. I would therefore ask to be excused from making any fuller statement to-day.

Bus Contract Tickets

Mr. W. R. Blyton (Houghton-le-Spring—C.) on December 10 asked the Minister of War Transport if he would consider restor-

ing the 12-journey tickets validity to 14 days, as existed before the war; and that contract tickets should be made available to the public in County Durham.

Mr. Alfred Barnes stated in a written answer: I am glad to say that the contract tickets, which were withdrawn during the war on bus services in the Northern Region, will be restored on February 1, 1946. It is not yet practicable to extend the period of validity of 12-journey tickets, but the matter is being kept under close review.

Entre Rios Railways Co. Ltd.

The ordinary general meeting of the Entre Rios Railways Co. Ltd. was held in London on December 11. Mr. B. H. Binder, F.C.A., Chairman of the company, in the course of his speech said that the satisfactory gross receipts were due in a large measure to continued commercial activity in Argentina throughout the year and the curtailment of road transport owing to the shortage of petrol and tyres, also to reduced competition from river craft.

Government traffic, which had to be carried at a 50 per cent. rebate, was substantially increased, but unfortunately payment had not been maintained in the same proportion and the amount owing to the company at June 30 last was nearly double that at the end of the previous year.

Working expenses had been heavy, due mainly to the greater cost of fuel and materials, and the higher salaries and wages the company had been obliged to pay to all employees under Government decree. Owing to the difficulty of obtaining coal, they had to rely, to a considerable extent, on firewood, and to obtain this took a large number of wagons out of public service, which reduced the earning capacity of the railway.

The net receipts of the past year of £402,812 at par of exchange represented an increase of 26 per cent. over those of the previous twelve months, but the large sum of £124,670 had to be deducted for exchange differences, leaving a balance of £278,142, which compared with £225,266 in 1943-44.

The results had enabled the interest on the 4 per cent. debenture stock to be paid regularly on the due dates and it had been possible to make a start on reducing the arrears of interest accumulated on the 5 per cent. debentures. One and a half years had been paid which, with the interest thereon, amounted to £82,629, bringing the payments on this security up to May 31, 1934. With a continuation of the present receipts it was reasonable to expect further payments to be made from time to time, but it should be borne in mind that the replenishment of the company's depleted stores would necessitate somewhat heavy purchases of materials which would have to be paid for out of current earnings.

The year had been a very difficult one. Despite the effects of exceptional drought and frosts it had been notable for the heavy traffic carried, with operations rendered extremely difficult owing to the lack of proper fuel and essential materials. An adjustment of conditions under which the railways were now working was overdue. It was to be hoped that as a result of the elections to be held in Argentina early next year a Government would be established which would collaborate with the railways to find a solution of the transport problem in the interests of all concerned.

As regards prospects for the current financial period, the traffic receipts to date showed an increase of \$1,038,100, but expenses remained on a high level for the reasons already mentioned.

The report and accounts were adopted.

Buenos Ayres & Pacific Railway Co. Ltd.

The annual meeting of the Buenos Ayres & Pacific Railway Company was held in London on December 13. The chairman, Mr. J. A. Goudge, C.B.E., in the course of a statement circulated with the report and accounts said that the improvement in revenue due to increased tariffs had been counterbalanced by increased wages, and the tale of mounting locomotive running costs continued, arising from the lack of coal and the cost of inferior fuels the company had to utilise inefficiently. During the war years, the cost of engine running had doubled, from £1,531,000 to £3,028,000 with consequent effect on profits.

Although they had now, at last, some favourable news regarding fuel, their working difficulties continued. In fact all the railways were in the greatest danger of suspending traffic. In these circumstances, they were glad to recognise the loyal and effective work of their manager and his staff.

The crops during the past year were not up to average and their cereal traffic for 1945-46 had so far shown considerable reduction in tonnage.

The chairman, in moving the adoption of the report and accounts, said that the policy of unifying the boards in London of the Argentine Railways had now been carried further by the constitution of a joint board in Buenos Aires. In view of the fact that at the end of 1946 the whole question of the concessions and the conditions under which the Argentine railways were run would come up for reconsideration, that alone would be a necessary step in order to enable concerted action to be taken in defence of all the interests involved.

He had, with great satisfaction, to notify that the company made a much better profit this year than last. This was primarily due to the increase in tariffs which Sir Montague Eddy was so successful in obtaining last year. That had enabled them, in a measure, to retrieve the position in which they were forced by the enormous increase in working expenses in regard to fuel and demands of wages.

Reviewing the outlook, the chairman quoted a Decree of the new Argentine Government expressing the view that it was for the welfare of the community that permission for the railways to utilise road transport for the collection and delivery of goods should be cancelled. He quoted this as an example of the difficulties with which they had to contend. Speaking generally, however, he thought he could forecast with some confidence for next year's report a better result than that now presented.

The report and accounts were adopted.

European Timetable Conference

A meeting of the European Timetable & Through Services Conference was held in Lugano on November 22 to 24. Agreements were reached on the improvement of international train services in the light of the discussions already held in Brussels on October 22 to 24 under the auspices of the European Central Inland Transport Organisation. The Brussels meeting was reported in *The Railway Gazette* of November 23, 1945.

The main object of the Lugano meeting was the improvement of existing international railway connections as well as the establishment of through services to

operate from May 6, 1946, when the summer timetables will be introduced on the various railway systems. About seventy delegates attended the meeting, including representatives of the Allied Military Commands in Austria, Italy and Germany, and of the railways of the United Kingdom, France, Belgium, Holland, Luxembourg, Czechoslovakia, Austria, Italy, and Switzerland.

A resolution was carried recommending the governments which adopt summer time to introduce it on the same date, namely, the first Sunday-Monday night in May; and similarly to revert to their winter time on the first Sunday-Monday night in October. These are the agreed dates on which the summer and winter timetables are to be introduced.

The meeting entrusted the Swiss Federal Railways with the organisation of the first full European Timetable & Through Services Conference, to be convened in Switzerland in the first fortnight of October, 1946. Ever since 1922, when this conference was instituted, the Swiss Federal Railways have been charged with the task of organising the meeting.

The main facilities and new through services decided upon by the Lugano meeting are enumerated below:—

Simplon-Orient Express.—Provided the approval of the Allied occupation authorities in Italy is obtained, the Simplon-Orient Express will be re-introduced during the first fortnight in January, running for the time being only between Paris and Venice, via Vallorbe, Lausanne, Brigue, and Milan, with a connection at Milan for Rome. The train will be either daily or thrice weekly, and will have sleeping cars between Paris-Rome, and Paris-Venice, as well as first and second class through coaches between Paris-Milan and Milan-Berne. At Milan connections will be provided from and to Belgium via Luxembourg and Basle, as well as from and to Calais via Lille, Thionville, Strasbourg, and Basle. Resumption of traffic with Dover via Calais is envisaged for March, 1946, when there will be a connection with the Simplon-Orient Express at Paris, and another via Lille and Basle at Milan.

In addition to the Simplon-Orient Express and to the existing day railcar connection between Paris and Lausanne via Vallorbe, a through night service between Paris and Lausanne will be introduced on May 6, 1946.

Paris-Geneva.—As from May 6, 1946, there will be a fast day and night train in both directions, between Paris and Geneva; also a fast train each way between Nice and Geneva via Lyons, and a daily railcar each way between Lyons and Geneva.

Paris-Arlberg Express.—Provided the approval of the Allied military authorities in Austria is obtained in time, a new connection between Paris and Prague via Basle, comprising sleeping cars and first and second class through coaches, will be available on this train early in January.

Belgium, Holland and Central Europe via Basle.—The new facilities between Belgium and Central Europe in connection with the Simplon-Orient Express (also from and to Calais) via Thionville, Strasbourg and Basle, will be secured by a daily fast train each way between Brussels and Basle conveying sleeping cars and through coaches between the two terminals as well as through coaches between Calais and Basle. Connection will also be made at Basle with the Arlberg Express, and with Gotthard route fast trains to and from Italy.

Beginning early in January there will also be a daily through train each way

between Brussels and Basle via Luxembourg, with sleeping cars and through coaches. These trains will replace the existing connections between Brussels and Basle, which entail a change of trains and a long break at Luxembourg.

Paris-Basle.—The night fast trains between Paris and Basle are to be accelerated as from May 6, 1946, and a new day train in both directions will be introduced as from the same date.

Paris-Berne via Belfont and Delle.—The night sleeping car trains on this route will be accelerated as from May 6, and on the same date a through day service in both directions will be introduced.

Paris-Berne via Les Verrières-Neuchâtel.—In addition to the existing day connection on this route (in France partly by railcar), there will be a through night train each way as from May 6, 1946.

L.M.S.R. Train Service Alterations

A number of alterations and additions of considerable importance are announced by the London Midland & Scottish Railway to be made in its train services from January 1. A new express will leave Manchester (London Road) at 4.5 p.m. for Euston, calling only at Stockport and Stafford (5.27/5.31 p.m.) and due Euston at 8.15 p.m. This will be followed by a new 4.5 p.m. from Liverpool to London, calling at Crewe and Nuneaton (6.24/8.28 p.m.) and due Euston at 8.35 p.m. The 9.45 a.m. restaurant car express from Manchester will leave at 9.40 a.m., and reach London at 1.35 p.m. (15 min. earlier); it will be followed instead of preceded by the 7.55 a.m. from Blackpool, which will arrive at 1.50 p.m. (15 min. later). The 8.18 a.m. Belfast boat express from Heysham will leave at 6.25 a.m., call only at Morecambe and Crewe (8.31/8.40 a.m.) and be due in Euston at 11.55 a.m., 2 hr. 55 min. earlier than now, and an acceleration of 62 min. In the down direction, departure of the boat train from Euston will be at 3.35 instead of 3 p.m.; and the only calls will be at Stafford, Crewe, and Preston, with an acceleration of 35 min.

The 10 a.m. from Blackpool to Euston will cease to call at Bletchley and be due in London at 3.44 p.m. (8 min. earlier); the 2.35 p.m. from Blackpool will cease to call at Nuneaton. The 7.46 a.m. from Crewe to Euston will omit its calls at Blisworth and Bletchley, and be due Watford at 11.7 a.m. and Euston 11.33 a.m. (11 min. earlier). The 11.15 a.m. from Windermere to Euston is to start at 10.50 a.m., and to reach London at 5.26 p.m. (29 min. earlier). An additional express will run from Birmingham on Friday evenings at 6.20 p.m. to Euston, calling only at Coventry, and due at 8.55 p.m.

On the West Coast Route various changes will be made from January 7. A relief to the 10 a.m. from Glasgow Central (at present carrying Glasgow-Euston passengers only) will leave at 9.25 a.m., call only at Carlisle (11.45/11.53 a.m.) and Crewe (3.10/3.21 p.m.), and be due in London at 6.49 p.m. The 8 a.m. from Stranraer, which hitherto has been running from Carlisle in these times, is to be diverted from the Western to the Midland Division, leaving Carlisle at 11.50 a.m., and calling at Leeds (2.29/2.37 p.m.), Sheffield (3.37/3.42 p.m.), and Leicester (1.17/5.24 p.m.); St. Pancras will be reached at 7.45 p.m. The 9.30 p.m. from Glasgow Central to Euston will now be composed of first and third class sleeping cars only; similarly the 9.15 p.m. from Euston

to Glasgow, except that the latter also will have limited first class seating accommodation. Sleeping cars for Glasgow on the 9.25 p.m. from Euston will now be available to London passengers, whereas hitherto they have been available from Rugby onwards only. The 4.20 p.m. sleeping car train from Inverness to Euston will leave at 4.35 p.m., and the 10.30 p.m. from Glasgow (Buchanan Street) to Inverness at 10.20 p.m.; but the present 10.20 p.m. from Glasgow to Aberdeen will start at 11 p.m., though reaching Aberdeen at 3.20 a.m. (only 5 min. later than before).

As regards other changes, the 4.55 p.m. from Leeds City and 5.10 p.m. from Bradford Forster Square once again will become

fast residential trains for Morecambe, non-stop Skipton to Lancaster, and due Morecambe at 6.44 p.m. (21 min. earlier); the connecting 5.55 p.m. from Skipton to Helli-field will be extended to Morecambe to make the intermediate stops cut out on the former express. Additional express trains will run from Whitehaven at 10.45 a.m. to Carlisle and Carlisle at 5.10 p.m. to Whitehaven, calling at Wigton, Maryport, and Workington in connection with important express services at Carlisle. A new 1.20 p.m. will run from Whitehaven to Barrow, connecting there with the 3.22 p.m. to the south; in the reverse direction there will be a new 9.55 a.m. from Carnforth to Barrow, with through coaches from Liver-

pool, and both the 12 noon from Carnforth to Barrow (through coaches from Manchester) and the 7 a.m. from Carnforth to Millom will run through to Whitehaven. The 8.35 p.m. (Saturdays only) from Whitehaven to Barrow will run daily. The 4 p.m. from Liverpool (Lime Street) to Llandudno will start at 4.15 p.m. and omit all stops to Chester, with an acceleration of 15 min. Through coaches between Newcastle and Bristol will run on the 6.50 p.m. train (9.32 p.m. from York), and in the reverse direction on the 7.30 p.m. from Bristol to York there will be through Newcastle coaches (due 5.37 a.m.). The 9.50 a.m. from Bournemouth West will carry through coaches for Derby.

Power-Operated Hand Tools on the L.N.E.R.

We referred in our December 14 issue to an exhibition of power-operated hand tools at Kings Cross which Mr. J. C. L. Train, Chief Engineer, L.N.E.R., had arranged for the benefit of the supervisors in the engineering workshops throughout the L.N.E.R. system. The primary object of the display was to bring to the notice of the supervisory workshop staff the many and various types of power-operated hand tools which are now procurable for facilitating and increasing productive work and to encourage the staff to adopt the new methods. The tools are available either for electrical or pneumatic operation. The electrical tools can be operated from public supply or if that is not available from portable petrol generating sets, the pneumatic tools being operated with the usual type of compressor. We reproduce a photograph of the opening of the exhibition by Mr. Train and also one showing a section of the exhibits. Arrangements were made for the workshop supervisors throughout the system to visit Kings Cross to observe some of the tools in operation. In the past, considerable efforts have been made to encourage the permanent way men to adopt new methods of working; the application of a similar principle for the first time in respect of the workshop staff should lead to a speeding up of maintenance arrears.



Mr. J. C. L. Train opening the Exhibition

Left to right: Messrs. G. Dow (Press Relations Officer); H. E. Stratton (Asst. to Chief Engineer, Steelwork); R. Peters (District Engineer, Edinburgh); A. E. Tattersall (Asst. Chief Engineer, Signals); B. P. Fletcher (District Engineer, Stratford); R. C. Rattray (Asst. to Chief Engineer, Development); J. C. L. Train (Chief Engineer); T. W. Brown (District Engineer, Aberdeen); J. Ness (Asst. General Manager, Works & General); and J. Taylor-Thompson (Engineer, York)



A section of the display of power-operated hand tools in the L.N.E.R. Chief Engineer's Exhibition at Kings Cross Station

Notes and News

Southern Railway Dividend Date.

We are informed that the board of the Southern Railway Company will meet to consider the results for the year 1945 on February 14, and not on February 22, as stated in our December 7 issue.

G.W.R. Cornish Flowers Traffic.

The G.W.R. is again handling large consignments of cut flowers from Cornwall and the Scilly Islands. In two days recently 13 tons, representing 1,448 boxes; of chrysanthemums, violets and anemones arrived at Paddington station in special vans attached to passenger and perishable goods trains. The season's outlook is good. Cornwall expects a 25 per cent. increase in traffic over last season.

Southern Railway Lecture & Debating Society.

Mr. V. A. M. Robertson, C.B.E., M.C., M.Inst.C.E., Chief Civil Engineer, Southern Railway, will give a lecture to the Southern Railway Lecture & Debating Society on January 10 on "The Work of the Civil Engineering Department of the Southern Railway." The chair will be taken by the Rt. Hon. the Earl of Radnor, Deputy Chairman of the Southern Railway Company. The lecture will be held at the Chapter House, St. Thomas's Street, S.E.1.

Pig Iron and Steel Ingot Production.

The figures below show pig iron and steel production in 1945, up to and including November:—

	Pig iron		Steel ingots and castings	
	Weekly average tons	Annual rate (000's omitted)	Weekly average tons	Annual rate (000's omitted)
1st half 1945	133,900	6,963	231,600	12,043
July	134,800	7,010	213,800	11,118
August	125,200	6,512	186,100	9,576
September	139,500	7,255	240,700	12,517
October	146,100	7,598	243,100	12,640
November	150,000	7,800	247,700	12,878

I.L.O. Committee on Inland Transport.

The first meeting of the International Labour Organisation Committee on Inland Transport was held in London on December 13, under the presidency of M. Henri Hauck, the French Government representative. Mr. Alfred Barnes, the British Minister of War Transport, welcomed the delegates. A preparatory report before the conference discusses the social problems of the industry, and future international co-operation concerning social policy and its "economic foundations in the industry." The committee will therefore have to consider what improvements in organisation can be effected in order that policy with regard to labour and conditions of service may have a sound economic basis. The report suggests that the committee might undertake an objective examination of the experience of transport operation under national and municipal ownership and by private companies.

The Railway Club Dinner.

Some 30 members of the Railway Club and guests assembled at Reggiori's Restaurant, Kings Cross, on Friday, December 14, for the first Railway Club dinner since December, 1938. The chair was taken by the President, Mr. E. Kenneth Brown. The toast of "The Railway Club" was proposed by Mr. N. McCracken, who pointed out that the bomb damage to the club's premises had now been made good, and that it was hoped to resume monthly meetings in the very near future. Mr. E. Kenneth Brown responded. "The Officers and Committee" were proposed by Mr. K. Fitch, who emphasised the enormous indebtedness of the club to the self-sacrificing work of these officers during the

difficult war years in preserving the nucleus of the club's life, and in particular the care with which its valuable library has been preserved. Mr. H. A. Vallance responded. The toast of "The Guests" was proposed by Mr. Charles E. Lee, Vice-President, and responded to by Mr. Robert C. Heney, formerly of the Chief Engineer's Department, Southern Railway, and now on the editorial staff of *The Railway Gazette*. The Railway Club was established in 1899, and is thus the oldest organisation of its kind, devoted to the interests of railwaymen and non-railwaymen with a common affection for railways and their history. The first dinner was held in 1903, but the series was interrupted by the 1914 war and again by the recent war.

Painting Experiments on L.P.T.B. Buses.

London Transport is experimenting with colour schemes for adoption on new and rehabilitated buses. The tests are being made on a limited number of its "STL"-type buses. On these the broken-white sections around the windows of the lower and upper decks is eliminated; the necessary break in colour is effected by longitudinal cream bands, one at lower-deck roof level and the other at upper-deck roof level. A roof margin in red is also incorporated. This colour scheme falls more closely into line with the standard already adopted on the railway and trolleybus stock of the Board.

The purposes behind the experimental change are:—

(1) Red has proved the most durable colour for arduous city operation.

(2) The painting process is simplified by being on a one-colour basis.

(3) Abandonment of the broken-white sections facilitates the daily cleaning of the vehicles.

Experience with the varnished red-roof domes which were standardised on the RT bus prior to the war has demonstrated the advantages gained in respect of roof cleanliness and smart appearance.

Government Factories Allocated to Industry.

Twenty-nine additional Government factories recently have been allocated by the Board of Trade to various firms for civilian production. They represent an area of over 7 million sq. ft. and will give employment eventually to about 35,000 persons. These allocations, like those previously announced, provide for a number of firms with good and important export connections, as well as for manufacturers of urgently-required consumer goods, including parts and equipment needed for the housing programme. Up to date, 170 Government factories, with an area of 44 million sq. ft. and estimated to provide employment for between 300,000 and 400,000 persons, have been allocated by the Board of Trade to private industry or for use by the Government as training centres or disposals depots. Nearly all the larger Government factories now have been allocated, and the space so dealt with amounts to more than three-fifths of the total expected to become available. Factories recently allocated include one at Sutton-in-Ashfield to Sheepbridge Stokes Centrifugal Castings Co. Ltd. (for post-war production of engine parts); at Worksop to George Turton Platts & Co. Ltd. (rail spikes); at South Maston to Vickers-Armstrongs Limited (aircraft); at Castle Bromwich to Dunlop Rubber Co. Ltd. (research); at Birmingham to Metropolitan-Cammell Carriage & Wagon Co. Ltd. (bus bodies); at Stockport to Crossley Motors Limited) public service and commercial vehicles); at Manchester to Dunlop Rubber

Co. Ltd. (rubber lining of acid tanks); at Newton-le-Willows to Vulcan Foundry Limited (locomotives).

New Motor Vehicles.—The Minister of War Transport announces that, in view of the increased production expected in 1946, he will discontinue at the end of the year the system of licences to acquire all types of new motor vehicles. Accordingly, no further licences will be issued by the Ministry. The manufacturers have undertaken to supply new vehicles to holders of

British and Irish Railway Stocks and Shares

Stocks	Highest 1944	Lowest 1944	Prices	
			Dec. 19, 1945	Rise/ Fall
G.W.R.				
Cons. Ord.	62½	55	55	— ½
5% Con. Pref.	122½	114½	107½	+ 1
5% Red. Pref. (1950) ..	110½	104	103	—
5% Rt. Charge	135½	128	122½	—
5% Cons. Guar.	134½	125	118½	—
4% Deb.	118½	112½	105½	+ 1
4½% Deb.	118½	114	107	—
4½% Deb.	124½	119½	115	—
5% Deb.	137	129½	125	—
2½% Deb.	77	73½	81½	—
L.M.S.R.				
Ord.	34½	27½	27	— ½
4% Pref. (1923)	64½	55	55½	+ ½
4% Pref.	81	72½	77	—
5% Red. Pref. (1955) ..	105½	102	102½	+ ½
4% Guar.	107½	99½	100	—
4% Deb.	111½	104	103½	xd
5% Red. Deb. (1952) ...	111	108	105½	—
L.N.E.R.				
5% Pref. Ord.	10½	7½	6½	—
Def. Ord.	5½	3½	3½	—
4% First Pref.	68½	55½	55	— 1
4% Second Pref.	35½	28½	27½	— ½
5% Red. Pref. (1955) ..	101	97½	97	— 1
4% First Guar.	101½	96½	98	— 1
4% Second Guar.	95½	88½	92	— 1
3% Deb.	88½	80½	90½	xd
4% Deb.	110½	103½	102½	xd
5% Red. Deb. (1947) ...	105½	101½	101	—
4½% Sinking Fund	107	104½	103½	xd
Red. Deb.	107	104½	103½	xd
SOUTHERN				
Pref. Ord.	80½	71½	72	— ½
Def. Ord.	26½	23	23	—
5% Pref.	122	113½	107½	+ 1
5% Red. Pref. (1964) ..	117½	112½	106½	— 1
5% Guar. Pref.	134	125½	117½	— 1
5% Red. Guar. Pref. (1957) ...	115½	112½	108½	—
4% Deb.	118	110	104½	xd
5% Deb.	135½	127	123½	xd
4% Red. Deb. (1962-67) ...	111½	107½	105½	xd
4% Red. Deb. (1970-80) ...	112	108½	105½	xd
FORTH BRIDGE				
4% Deb.	107	103	104	—
4% Guar.	106½	102	103	—
L.P.T.B.				
4½% "A"	125	119	120½	—
5% "A"	133½	128	130½	—
3% Guar. (1967-72) ...	99½	98	98½	—
5% "B"	124½	118½	118	— ½
"C"	72½	64½	59	— 2
MERSEY				
Ord.	35½	33	32	—
3% Perp. Pref.	72	66	69	—
4% Perp. Deb.	105	103	104	—
3% Perp. Deb.	85½	79½	81	—
IRELAND* BELFAST & C.D.				
Ord.	9	6	7½	—
G. NORTHERN				
Ord.	33½	19	33	+ 1
Pref.	49	37	52	—
Guar.	70	57½	78½	—
Deb.	90½	81½	96½	—
IRISH TRANSPORT				
Common	—	—	80½	+ ½
3% Deb.	—	—	102	+ ½

* Latest available quotation

licences to acquire already issued before meeting orders of other customers. The Minister also is removing at the end of the year the control on sale of second-hand public service vehicles, which no longer will need the authority of a licence from the Regional Transport Commissioner.

Railway Rates Tribunal.—The Court of the Railway Rates Tribunal will sit on the following dates: January 22, February 19, March 19, April 16, May 28, June 18, July 16, October 22, November 19, December 17, 1946, to hear applications as to the granting of new, or the reduction of existing exceptional, rates for which the tribunal is required, and applications to the tribunal for new exceptional rates or for the reduction of exceptional rates. The court will sit on the following dates: January 29, April 30, July 23, October 29, 1946, to hear applications to determine any questions as to the alteration of the classification of merchandise, or the alteration of the classification of any article, or the classification of any article not at the time classified, or any question as to the class in which any article is classified; applications as to the reductions to be made from the standard charges where damageable merchandise is carried under owner's risk conditions; and applications to determine any question as to whether any rebate is or was allowable or as to the basis on which any rebate should be or should have been calculated under the Railway Freight Rebates Scheme. Printed copies of the procedure to be followed in any of the above-mentioned applications may be obtained from the office of the tribunal, Wellington House, 125 to 130, Strand, London, W.C.2.

Great Southern of Spain Railway Co. Ltd.—The directors of the Great Southern of Spain Railway Co. Ltd. state that their report for the year ended December 31, 1944, has been delayed in the hope of being able to advise stockholders of some settlement of the question of compensation in connection with the incorporation of this railway into the National Railway system, but no fresh development has taken place. Under the law, dated January 24, 1941, the compensation to be accorded to the concessionary companies concerned, in

respect of the anticipation of the reversion to the State or their concessions, was to take the form of an annuity for each unexpired year thereof, but a subsequent Law, dated February 27, 1943, provided, as an alternative, for the voluntary exchange of the shares and debentures of the concessionary companies for bonds of the 3½ per cent. amortizable debt of the State issued in 1942. The directors are still awaiting advice of the final decision of the Spanish Government in the case of this railway as to the amount of the annuity in accordance with the dispositions of the 1941 law, and of the ratio fixed by the Government for the exchange of the securities of this company under the 1943 law. Meanwhile, it remains impossible to make any estimate of the final result of either alternative, or any comparison between the two.

The Bolivia Railway.—The agents in London of the Bolivia Railway have announced that £35,000 of the 5 per cent. mortgage and collateral trust "A" income bonds of this company have been drawn for purchase and retirement on the first of next month at par, but holders will retain the coupon maturing on April 1 next. It will be recalled that this company was incorporated in the United States in 1907 to construct railways under Bolivian Government concessions and that the four sections were opened on various dates between 1909 and 1920. All are operated by the Antofagasta (Chili) & Bolivia Railway on a 99-year lease from December, 1908, at rentals which are now 40 per cent. of the gross receipts. Under a re-organisation plan of November, 1931, £1,673,840 series "A" and £4,042,400 series "B" mortgage and collateral trust income bonds of the Bolivia Railway were issued in exchange for the original bonds; the "B" bonds went to the Antofagasta Railway, which so long as it continues to lease the Bolivia Railway, guarantees a minimum of 3 per cent. on the "A" bonds, which mature at the beginning of 1967. The issued share capital of the Bolivia Railway consists of £6,415,344 of consolidated ordinary stock and £2,000,000 preference stock, on which no dividends have been paid for some years, nor can any be forthcoming until £150,000 of debentures have been redeemed.

Contracts and Tenders

Mr. Sam Perry has been appointed Sales Manager of the General Upholstery Section in the Dunlopillo Division of the Dunlop Rubber Co. Ltd. His headquarters will be in London.

Below is a list of orders placed recently by the Egyptian State Railways:—

Hoffman Manufacturing Co. Ltd.: Ball bearings.
Edison Swan Electric Co. Ltd.: Rectifiers.
Browett-Lindley Limited: Spares, for air compressor.
B. Elliott & Co. Ltd.: Grinding machines.
Suffolk Iron Foundry (1920) Limited: Welding rods.
Imperial Chemical Industries Limited: Ammonium chloride.
J. Stone & Co. Ltd.: Glasses for gauges.
S. & C. Bishop & Co. Ltd.: Gauge glasses.
Chance Brothers Ltd.: Lenses.
John Moncrieff Limited: Glass for gauge rectifiers.
Joseph Toney & Sons Ltd.: Glasses for gauge protection.
Docker Brothers: Paints and varnishes.
Colthurst & Harding Co. Ltd.: Paints and varnishes.
Siemens Brothers & Co. Ltd.: Paints and varnishes.
Robert Bowron & Co. Ltd.: Paints and varnishes.
Bullers Limited: Porcelain line insulators.
British Insulated Callender's Cables Limited: Insulated manilla rolls.
Attwatter & Sons Ltd.: Ebonite fibre sheets.
Sentinel (Shrewsbury) Limited: Grease nipples.
Richard K'inger Limited: Packing sleeves.
Yorkshire Patent Steam Wagon Company: Valves.
North British Locomotive Co. Ltd.: Cross-heads and axle boxes.
Buck & Hickman Limited: Paints.
Consolidated Pneumatic Tool Co. Ltd.: Pneumatic tools.
Standard Telephones & Cables Limited: Telegraph and telephone material.
Gresham & Craven Limited: Locomotive spares.
Clayton Tinplate Co. Ltd.: Mild steel plates, sheets tinned and galvanised.
Boulton & Paul Limited: Mild steel sheets tinned and galvanised.
Davies & Metcalfe Limited: Locomotive spares.
Robert Hyde & Sons Ltd.: Locomotive spares.
Metropolitan-Cammell Carriage & Wagon Co. Ltd.: Locomotive spares.

New Restaurant Cars for the Great Western Railway



Two interior views of the new restaurant cars which the G.W.R. is bringing into service on December 31. On the left part of a first class car is shown and on the right is a general view of a third class car

Railway Stock Market

The stock and share markets are concluding the year with a firmer tendency than seemed likely at one time. Business has been on a small scale because of holiday influences; there was little evidence of year-end realisations, a waiting attitude prevailing. Firmness in British Funds and a tendency for long-dated stocks to resume their upward trend proved helpful to sentiment generally. Small indefinite movements ruled in industrials, with colliery shares steady on the view that the Coal Nationalisation Bill provides a reasonable basis for fair compensation so far as can be judged at this stage. It is realised, however, that it cannot be assumed that a similar basis will be forthcoming in regard to transport nationalisation, which is likely to prove an even more complicated project than that in respect of coal. No importance was attached in responsible quarters to a reported statement by an N.U.R. official that a Bill for nationalisation of the railways will be presented early in the New Year, and that compensation for stockholders would be on the basis of revenue for 1935, 1936 and 1938. Reflecting the recent easier trend in markets, home railway junior stocks have lost a little ground, but declines were fractional; in contrast a firmer tendency was maintained in Great Western and Southern 5 per cent. preference stocks and 4 per cent. debentures, which continued to attract a little buying after their recent downward trend.

Whereas 1944 was a year of steadily rising prices so far as industrial shares were concerned, there have been somewhat sharp

fluctuations in the past year, reflecting nationalisation, the changed conditions brought about by the cancellation of war contracts and the difficulties of the change-over to peacetime working. Home railway junior stocks have made some recovery from the fall which followed the General Election and nationalisation uncertainties, but are much below the highest for the year. Those preference stocks and debentures which were quoted well above par have declined substantially since the election. Great Western 5 per cent. preference, for instance, is now 107½ (comparing with 1945 highest and lowest levels of 124½ and 104½), and the 4 per cent. debentures, now 105½, were up to 118 earlier in the year. Similarly, Southern 5 per cent. preference (108) had extremes during the year of 124½ and 104, and in the case of the 4 per cent. debentures (105) they were 117 and 104½. The fall in stocks hitherto quoted well over par reflects uncertainty as to the terms of compensation in the event of nationalisation.

Great Western ordinary, now 54½, had extremes (in 1945) of 60½ and 47½. Southern deferred's extremes were 27 and 20½, comparing with the current level of 23, and the preferred, now 72, has been up to 79½ and down to 63 in the past twelve months. L.N.E.R. second preference (27½) had extremes of 33½ and 24½ and, in the case of the first preference, now 56, they were 62½ and 49; the 4 per cent. debentures, now 102½, were 109½ earlier in the year and have since been down to 101. L.M.S.R. ordinary (1945 extremes 33 and 23½) is now 27½; the 1923 preference has

touched 65 and been down to 50½, comparing with the current level of 56½. London Transport 5 per cent. "A" (1945 extremes 135½ and 127) is now 131; the "C" stock's extremes were 70½ and 57½, comparing with the current level of 60.

Argentine railway stocks have continued under the influence of political news from the Republic and recently lost further ground, but subsequently steadied. In many cases prices are closing the year not much above lowest levels recorded in the past twelve months. As in the case of the home railways, 1946 is likely to prove vital to the position and outlook of the British-owned Argentine railways. Buenos Ayres Great Southern, now 10½, had extremes during the past twelve months of 12 and 8½; in the case of the 5 per cent. preference (now 23½) extremes were 28½ and 22½; and in regard to the 4 per cent. debentures, 68½ and 58, comparing with the current level of 61. Among other stocks, Buenos Ayres & Pacific consolidated debentures, now 54½, had highest and lowest levels of 62½ and 52½ in the past twelve months. As to Central Argentine 5 per cent. debentures, the extremes were 70 and 58 and the current price 57½. Buenos Ayres Western ordinary is now 9½ (extremes 12½ and 9½) and 4 per cent. debentures, now 54½, had extremes of 62½ and 52½. Elsewhere, San Paulo ordinary, now 50½, fluctuated during the year between 60½ and 50½, and United of Havana 1906 debentures (now 17½) between 29½ and 15. Extremes for Canadian Pacific were 23 and 14½, the current level being 22½.

Traffic Table and Stock Prices of Overseas and Foreign Railways

Railways	Miles open	Week ended	Traffic for week		No. of Week	Aggregate traffic to date			Shares or Stock	Prices					
			Total this year	Inc. or dec. compared with 1943, 4		Totals		Increase or decrease		Highest 1944	Lowest 1944	Dec. 18 1945			
						1944, 5	1943, 4								
South & Central America	Antofagasta	834	9.12.45	£ 32,770	+	£ 3,480	23	1,448,860	1,410,960	+	37,900	Ord. Stk.	13½	9½	10½
	Arg. N.E.	753	8.12.45	18,393	+	1,143	23	435,200	409,206	+	25,994	"	6½	4½	6½
	Bolivar	174	Nov., 1945	4,706	—	91	47	53,283	58,052	+	4,769	6 p.c. Deb.	18½	7½	6½
	Brazil	2,771	8.12.45	155,125	+	15,500	23	2,972,000	2,861,625	+	110,375	Bonds	19½	3½	22½
	B.A. Pacific	5,080	8.12.45	238,187	+	23,938	23	4,465,525	4,120,687	+	344,938	Ord. Stk.	14½	9½	11½
	B.A.G.S.	1,924	8.12.45	85,250	+	13,375	23	1,665,875	1,579,500	+	86,375	"	13½	9½	10½
	B.A. Western	3,700	8.12.45	196,081	+	24,394	23	4,356,725	4,033,978	+	322,747	"	10½	6½	7½
	Cent. Argentine	972	8.12.45	39,153	+	6,896	22	825,736	729,214	+	96,522	Dfd.	4½	3	4
	Do.	262	Oct., 1945	31,759	+	8,147	18	128,126	97,913	+	25,313	Ord. Stk.	5½	4	6½
	Costa Rica	70	Nov., 1945	28,954	—	546	47	330,489	294,943	+	35,546	1 Mt. Deb.	101	101	101½
	Dorada	808	8.12.45	26,200	+	3,937	23	604,731	535,912	+	68,819	Ord. Stk.	6½	4½	6½
	Entre Rios	1,030	8.12.45	30,800	+	1,200	49	1,255,200	1,095,800	+	159,400	Ord. Stk.	38/-	23/3	25/-
	G.W. of Brazil	794	Nov., 1945	\$636,212	+	\$89,678	47	\$8,130,214	\$6,827,493	+	\$1,302,721	"	—	—	—
	Inter. Ctl. Amer.	22½	Nov., 1945	6,417	+	1,040	47	68,797	83,595	+	14,798	5 p.c. Deb.	88	79	70
	La Guaira	1,918	8.12.45	55,075	+	9,209	49	2,642,075	2,277,534	+	364,541	Ord. Stk.	5½	4½	4
	Leopoldina	483	7.12.45	ps.516,500	+	ps.65,800	22	ps.14,535,600	ps.11,024,000	+	ps.3,511,600	Ord. Stk.	½	½	1½
	Mexican	319	Oct., 1945	18,170	+	2,475	17	73,231	67,021	+	6,810	"	—	—	—
	Midland Uruguay	382	30.11.45	9,464	+	1,736	47	173,679	168,844	+	4,795	Ord. Sh.	75/10	65/10	74/-
	Nitrate	113	Oct., 1945	7,124	+	1,083	19	175,029	187,587	—	1,642	"	—	—	—
	N.W. of Uruguay	274	7.12.45	£80,365	—	£13,209	23	£1,392,227	£1,381,123	+	£11,104	Pr. Li. Stk.	79½	68	78½
Paraguay Cent.	1,059	Nov., 1945	139,346	+	11,373	21	704,271	636,125	+	68,146	Pref.	9	10	8½	
Peru Corp.	100	Oct., 1945	c 105,000	+	c 29,000	16	c 376,000	c 323,000	+	c 53,000	"	—	—	—	
Salvador	153½	—	—	—	—	—	—	—	—	—	Ord. Stk.	57½	46	52½	
San Paulo	156	Nov., 1945	2,630	+	590	21	12,320	12,775	—	455	Ord. Sh.	21/3	13/9	15/3	
Taltal	1,301	8.12.45	43,289	+	2,918	22	1,011,096	1,075,645	+	64,549	Ord. Stk.	4	2½	1½	
United of Havana	73	Oct., 1945	2,274	—	790	17	7,317	5,683	+	1,634	"	—	—	—	
Uruguay Northern	23,569	Oct., 1945	7,326,200	—	173,000	43	72,790,200	73,128,800	—	338,600	"	—	—	—	
Canadian National	17,030	14.12.45	1,177,200	+	13,000	49	60,546,200	60,979,800	—	433,600	Ord. Stk.	17½	13½	22	
Canada	Canadian Pacific	202	Oct., 1945	21,412	—	3,457	29	166,642	165,000	+	1,642	Ord. Stk.	129½	97½	123½
	Barsi Light	204	Sept., 1945	73,712	+	2,422	52	920,575	971,166	—	50,591	"	—	—	—
	Beira	607	10.11.45	24,680	+	3,618	33	374,935	416,539	—	41,604	Prf. Sh.	7½	5½	9½
	Egyptian Delta	—	—	—	—	—	—	—	—	—	B. Deb.	63½	58	66½	
	Manila	277	Oct., 1945	19,549	—	2,494	16	64,836	82,970	—	18,134	Inc. Deb.	101½	99½	95½
	Mid. of W. Australia	1,900	29.9.45	81,372	+	12,896	26	1,316,308	1,591,450	—	275,142	"	—	—	—
	Nigeria	2,445	Sept., 1945	517,095	+	631	52	6,069,664	6,439,433	—	369,769	"	—	—	—
	Rhodesia	13,301	27.10.45	1,014,285	+	48,298	30	29,890,212	26,415,587	+	3,474,625	"	—	—	—
South African	4,774	Aug., 1945	1,250,584	—	42,708	—	—	—	—	—	"	—	—	—	
Victoria	—	—	—	—	—	—	—	—	—	—	"	—	—	—	

Note. Yields are based on the approximate current price and are within a fraction of ½. Argentine traffic is given in sterling calculated @ 16 pesos to the £. Receipts are calculated @ 1s. 6d. to the rupee.

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